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ABSTRACT

The data presented in this report were compiled from the National Science Foundation's (NSF) fiscal year 1994 Survey of Scientific and Engineering Expenditures at Universities and Colleges. Surveyed are science and engineering expenditures for separately budgeted research and development. Terms used in institutional accounting procedures are incorporated throughout the tables. Data were collected from 681 institutions of higher education in the United States and outlying areas and 18 federally-funded research and development centers. Seventy-four detailed statistical tables are included in this report. Data are categorized on the basis of field, source of funds, geographic distribution, expenditure amount, and institution. (JRH)

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ED 399 168

Academic Science and Engineering: R&D Expenditures

Fiscal Year 1994

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Detailed Statistical Tables

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Division of Science Resources Studies
Directorate for Social, Behavioral and Economic Sciences

National Science Foundation

NSF 96-308

Academic Science and Engineering: R&D Expenditures

Fiscal Year 1994

Detailed Statistical Tables

M. Marge Machen, Project Officer

Division of Science Resources Studies
Directorate for Social, Behavioral and Economic Sciences
National Science Foundation
NSF 96-308

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Contributors

Data collection, preparation, and tabulations were performed by Quantum Research Corp. for the National Science Foundation. The Project Officer for this report was M. Marge Machen.

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GENERAL NOTES

The data presented in this report were compiled from the National Science Foundation's (NSF's) fiscal year (FY) 1994 Survey of Scientific and Engineering Expenditures at Universities and Colleges (R&D expenditures survey). They refer to science and engineering expenditures for separately budgeted research and development (R&D). Terms used in institutional accounting procedures are incorporated throughout the tables.

The term "separately budgeted R&D expenditures" includes all funds expended for activities specifically organized to produce research outcomes and commissioned by an agency either external to the institution or separately budgeted by an organizational unit within the institution. "Expenditures" are funds actually spent by an institution during its fiscal year. "Separately budgeted R&D equipment purchased from current funds" includes all research equipment purchased under sponsored research project awards.

"Federally funded research and development centers" (FFRDCs) are R&D-performing organizations that range from the traditional contractor-owned/contractor-operated or Government-owned/contractor-operated organizational structures to various degrees of contractor/Government control and ownership. FFRDCs are formed to achieve particular Federal R&D objectives that cannot be met as effectively by existing organizations.

The terms "imputation" and "imputed data" refer to the computerized process by which NSF develops estimates of data when institutions do not furnish the information upon request. Using this process, estimates are developed that are based primarily on key data items reported in prior years' surveys when available. When not available, estimates are based on figures derived from data of respondent institutions that have similar characteristics, including highest degree granted and type of institutional control (public or private). In this publication, the letter "i" is used to identify imputed data and the letter "e" is used when institutional respondents indicated that their data were estimated, or when data required slight mathematical adjustments.

Data presented in trend tables are assembled from the most recently completed survey cycle. Since prior years' data are reviewed for consistency with current year responses and, when necessary, are revised in consultation with institutional respondents, references to prior years' data should be restricted to this document.

Requests for additional information concerning the survey findings for the current or prior surveys should be directed to M. Marge Machen at—

Research and Development Statistics Program
Division of Science Resources Studies
National Science Foundation
4201 Wilson Boulevard, Suite 965
Arlington, VA 22230

Telephone: (703) 306-1772, ext. 6934
Internet: mmachen@nsf.gov

SECTION A.

TECHNICAL NOTES

SCOPE OF THE SURVEY

Data for the National Science Foundation's (NSF's) fiscal year (FY) 1994 report on research and development (R&D) expenditures were collected from 500 institutions of higher education in the United States and Outlying Areas. These institutions were selected from the universe of 681 schools that have doctoral programs in science and engineering (S&E), are historically black colleges or universities that expend any amount of separately budgeted R&D in S&E, and/or are other institutions that expend at least $50,000 in separately budgeted R&D in S&E.

In addition, the survey includes 18 federally funded research and development centers (FFRDCs). To qualify, an FFRDC must be engaged in basic or applied research, development, or management of R&D activities, and the results of these activities must be directly monitored by the Federal Government—usually a single agency—in a relationship expected to be maintained on a long-term basis. The center must be operated, managed, and administered by either a university or consortium of universities as an autonomous organization or as an identifiable separate operating unit of its parent institution. Finally, 70 percent or more of the center's financial support must be received from the Federal Government.

Although the same survey form (NSF Form 411) is used to collect data from both academic institutions and FFRDCs, the resulting data are presented separately in this report. The survey population was reviewed prior to mailing the questionnaires to ensure that each institutional classification was accurate. Characteristics of the schools were reviewed before and during the course of the survey to determine if changes had occurred (i.e., in highest degree granted or in terms of school openings, closings, or mergers).

SURVEY INSTRUMENT

Most major R&D performers have incorporated into their recordkeeping systems the data that are essential to complete this survey, thereby ensuring a consistent format from one year to the next. Such consistency yields the most useful statistics for time series. As a rule, information to complete this questionnaire is found within the institutions' year-end accounting records.

The survey questionnaire consists of three main items:

Item 1 is a request that institutions report their total current expenditures for separately budgeted science and engineering R&D for all activities specifically organized to produce research outcomes and commissioned by an agency either external to the institution or separately budgeted by an organizational unit, i.e., research centers, within the institution by source of funds. In addition, schools are asked to provide the percentage of the total and the percentage of the federally financed expenditures that are considered basic research. Included also are research funds for which an outside organization, educational or other, is a subrecipient. Care should be observed when interpreting data on source of funds; for example, industry R&D support is limited to grants and contracts for R&D activities from profit-making organizations, and the total reported excludes research funded through unrestricted accounts and from corporate foundations, endowments, and fellowships to students. An increasing number of institutions have linkages with industry and foundations via subcontracts, thus complicating the identification of funding source. In addition, institutional policy may determine whether unrestricted State support is reported as State or as institutional funding.

Item 2 is a request for total and federally financed current fund expenditures for separately budgeted R&D activities by detailed S&E fields. Major fields remain unchanged from the FY 1993 questionnaire. When interpreting these data at the detailed discipline level, users should keep in mind that there is considerable interdisciplinary activity and/or overlap among subdisciplines.

Item 3 is a request for the portions of total and federally financed expenditures reported in items 1 and 2 that were used for the purchase of research equipment out of current funds. This portion includes all research equipment purchased under sponsored research project awards and disbursed in the same detailed disciplines as in item 2. These data are of special interest to Federal and institutional policymakers in determining current funding levels for scientific research instrumentation.

RESPONSE RATE

The FY 1994 survey questionnaires were mailed in October 1994. Every effort was made to maintain close contact with respondents in order to preserve both consistency and continuity in the resultant data. Questionnaires were carefully examined for completeness upon receipt. Computerized facsimiles of the survey data were then prepared for each institution, comparing the current and 2 prior years' data and noting any substantive disparities. These facsimiles were mailed to the respondents so that they could provide revisions before final processing and tabulation of the data.

Respondents were asked to explain significant discrepancies between current and prior years' reporting patterns previously verified as correct. They were encouraged to correct prior years' data if anomalies were identified. When updated or amended figures covering past years were submitted, trend data were correspondingly changed by NSF. Similarly, if a respondent institution underwent an organizational change, such as a merger, NSF incorporated the effects of such changes into prior years' data.

By the survey closing date in mid-June, forms had been received from 498 universities and colleges out of the academic sample population of 500, resulting in a 99.6-percent response rate. Responses were received from 99.7 percent of all doctorate-granting institutions, where 97.8 percent of the R&D expenditures in S&E fields was disbursed. Also, forms were received from all 18 FFRDCs. Tables A-1a and A-1b display a detailed breakdown of the response rates by highest degree granted and by sampling stratum (defined later in this section under "Sampling, Weighting, and Standard Errors of the Estimates").

NATIONAL TOTAL AND IMPUTATION

To provide a national estimate for all universities and colleges performing R&D in FY 1994, it was necessary to implement three statistical procedures. First, data were estimated by "imputation" for less than 1 percent of the sample population that had not responded by the closing date of the survey. Imputation has been used consistently since FY 1976. Second, data were also imputed for universities and colleges that submitted only partial responses. The imputed total, prior to weighting, was $5 million. Third, the sample total was weighted to compensate for those universities and colleges that were in the survey universe but not in the survey sample. (This procedure is described later under "Sampling, Weighting, and Standard Errors of the Estimates.") This process led to an inflation of $204 million in the national total of R&D expenditures at universities and colleges for FY 1994, resulting in a $21.1 billion total, as shown in table A-2. (The imputed total was inflated to $7 million, as noted in table A-2.)

Tables A-3a and A-3b present breakdowns of both the imputed amounts and the amount of the weighted inflator by broad S&E field. The dollar amount imputed is displayed along with the percentage it represents of the national estimate for universities and colleges in a particular field. Also given is the amount of the weighted inflator for that field. The amount imputed is similarly broken down by source of funds in table A-4.

A significant number of surveyed institutions have been responding only intermittently in past years, providing data one year, not responding for one or more subsequent years, and then providing data again. For the years in which no response was received, data have been imputed as previously described. Although the imputation algorithm accurately reflects national trends, it cannot account for reporting anomalies at individual institutions. For this reason a separate backcasting of prior years' data was performed, following current-year imputation.

For each institution, formerly imputed key variables for items 1 to 3 were compared with subsequent submissions to determine whether the imputed data accurately represent the growth patterns shown by reported data. Re-estimation was applied when the imputed data were not consistent with reported data. If data were reported for fiscal years 1991 and 1994 but not for the intervening years, for example, the difference between the reported figures for each item total was calculated and evenly distributed across the intervening years (1992–93). The new figures were spread across disciplines (items 2 and 3) or sources of support (item 1) on the basis of the most recent reporting pattern. A clean facsimile was generated for each of the institutions undergoing these procedures and returned to the school for comment. These procedures resulted in much more consistent reporting trends for individual institutions but had little effect upon aggregate figures reflecting national totals.

DATA ANOMALIES

Aggregate academic expenditure data are generally consistent from year to year, although data for individual institutions may vary considerably. Data anomalies may reflect true increases or decreases in expenditures or may be the result of changes in reporting methodology.

HIGHEST-DEGREE-GRANTED TABLES

Several longitudinal tables display data for institutions whose highest S&E degree granted is at the doctoral level. In tables produced prior to FY 1992, it would have been difficult to identify whether changes in yearly R&D expenditures were caused by changes in expenditure levels or in the number of doctorate-granting institutions. In order to maintain a consistent group of institutions across all years, the highest-degree-granted status for each institution is based on the highest degree granted in the most recent year, FY 1994.

SAMPLING, WEIGHTING, AND STANDARD ERRORS OF THE ESTIMATES

Full population surveys are conducted by NSF every 5 years. During intervening years, a sample of institutions is drawn and surveyed. Only universities and colleges are included in the sampling frame; FFRDCs are always surveyed. Since a full population survey was conducted in FY 1993, a new sample of institutions was drawn for the FY 1994 survey. This sample will be maintained and resurveyed for the next 3 years until the next full population survey in FY 1998. Universities and colleges have been divided into the following four sampling strata (three certainty strata and one probability stratum):

(1) **A certainty stratum of doctorate-granting institutions.** This stratum contains 316 universities and colleges that have doctoral programs in S&E. Excluded from this stratum are all doctorate-granting historically black colleges and universities (HBCUs) and university-system campuses.

(2) **A certainty stratum of HBCUs.** This stratum includes all 65 HBCUs (including those that are doctorate-granting institutions or university-system campuses).

(3) **A certainty stratum of university-system campuses.** This stratum includes 56 "university-system campuses"; each sample entry is the aggregation of all campuses that make up a university system. Note that no HBCUs are included in this stratum even if they are university-system campuses.

(4) **A probability stratum of institutions that grant degrees at the master's level or below.** This stratum includes 63 master's or bachelor's degree-granting institutions and institutions that offer no S&E degrees at any degree level, out of a survey stratum universe of 244. Note that none of the universities or colleges included in this stratum is either an HBCU or a university-system campus. This stratum had a sampling ratio of 26 percent.

The data in this report are weighted to represent national-level R&D expenditures for universities and colleges (as mentioned previously under "National Total and Imputation"). The sample data, after imputation, were inflated to produce universe estimates by weighting the individual questionnaire data values by the inverse of the sampling ratio. Thus, in aggregating data for institutions from the probability stratum for tabulation purposes, each datum value was weighted by the inverse of the sampling ratio.

Estimates derived for institutions in the probability stratum were based on a sample, and the relative standard error (coefficient of variation) of an estimate was then obtained by dividing the standard error by the estimate itself, expressed as a percentage of the estimate.

The standard errors and coefficients of variation for each major S&E field are shown in table A-5. For example, for total academic R&D expenditures of $21.1 billion, the standard error of the estimate is $98.7 million at the 95-percent confidence level, with a coefficient of variation of ±0.5 percent. Similarly, for the estimate of $12.7 billion in federally financed expenditures, the 95-percent confidence limits are ± $54.3 million, with a coefficient of variation of ± 0.4 percent.

DATA AVAILABILITY

Data published in this report are also available on diskette and on the World Wide Web. Single-year or multi-year data files are available with data for FY 1975 through FY 1994. Information on file formats and the years for which they are available, with instructions for downloading, can be found on the World Wide Web at URL *http://www.qrc.com/nsf/srs/rdexp/93pubuse/start.htm*, or in the current data user guide, *Guide to the Data Files from the National Science Foundation's Annual Surveys of Academic Science and Engineering*. To obtain the guide in hard copy form, contact M. Marge Machen.

Selected data items for individual doctorate-granting and master's-granting institutions are available on computer-generated institutional profiles. These profiles cover data from this survey as well as data collected in NSF's other academic S&E surveys: the Survey of Graduate Students and Postdoctorates in Science and Engineering (graduate student survey) and the Survey of Federal Support to Universities, Colleges, and Nonprofit Institutions (Federal support survey). Institutional profiles are also available on the World Wide Web *(http://www.qrc.com/nsf/srs/profiles/start.htm)*, or can be ordered in hard copy form through Mr. Richard Bennof. He can be reached at—

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Institutional researchers can obtain data from several academic S&E resources through the Computer-Aided Science Policy Analysis and Research (CASPAR) database system, which is an easy-to-use tool for the retrieval and analysis of statistical data on academic S&E resources. CASPAR provides an extensive and growing data library with multi-year statistics on the state of higher education in general and on academic S&E resources specifically. This data library is based on a set of standard institutional and field-of-science definitions across the multiple sources used to develop the database. The CASPAR program includes built-in help capabilities to facilitate the use and interpretation of the data.

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CASPAR data are drawn from a number of sources. All data are available for individual institutions, by State, and at the national level. Longitudinal data from surveys of universities and colleges conducted by the NSF Division of Science Resources Studies include the R&D expenditures survey, the Federal support survey, and the graduate student survey. Data from the surveys of universities and colleges conducted by NCES include earned degrees, opening fall enrollment, faculty salaries, tenure and fringe benefits, and financial statistics.

SECTION A. TABLES

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Table A-1a. Response rates for the Academic Science and Engineering R&D Expenditures Survey at all institutions, by type of institution: FY 1994

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Highest degree granted	Number in survey universe	Number in sample population	Number of complete responses	Number of partial responses	Total number of responses	Response rate
Grand total	699	518	380	136	516	99.6
Universities and colleges total	681	500	362	136	498	99.6
Doctorate	349	349	255	93	348	99.7
Master's	202	84	62	21	83	98.8
Bachelor's and no S&E degree	130	67	45	22	67	100.0
FFRDCs total	18	18	18	0	18	100.0

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table A-1b. Response rates for the Academic Science and Engineering R&D Expenditures Survey at universities and colleges, by sampling stratum and highest degree granted: FY 1994

Page 1 of 1

Sampling stratum	Number in survey universe	Number in sample population	Number of complete responses	Number of partial responses	Total number of responses	Response rate
Grand total	681	500	362	136	498	99.6
Doctoral stratum[1]	316	316	231	84	315	99.7
HBCU stratum	65	65	41	24	65	100.0
Doctorate	11	11	7	4	11	100.0
Master's	17	17	11	6	17	100.0
Bachelor's and no S&E degree	37	37	23	14	37	100.0
University system stratum	56	56	44	12	56	100.0
Doctorate	22	22	17	5	22	100.0
Master's	29	29	24	5	29	100.0
Bachelor's and no S&E degree	5	5	3	2	5	100.0
Master's or below stratum[2]	244	63	46	16	62	98.4
Master's	156	38	27	10	37	97.4
Bachelor's and no S&E degree	88	25	19	6	25	100.0

[1] Doctoral stratum does not include doctorate-granting institutions that are recorded in either the HBCU or the university system stratum.

[2] Master's or below stratum does not include master's-granting institutions or bachelor's and no S&E degree granting institutions that are recorded in either the HBCU or the university system stratum.

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table A-2. Imputed amounts for the Academic Science and Engineering R&D Expenditures Survey at universities and colleges, by type of institution: FY 1994

[Dollars in millions]

Page 1 of 1

Highest degree granted	National estimate of separately budgeted R&D expenditures	Amount inflated due to weighting	Imputed amount	Imputed amount as percent of total
Total	21,081	204	7	0.0
Doctorate granting institutions	20,624	0	5	0.0
Non-doctorate granting institutions	457	204	3	0.6

NOTE: Because of rounding, figures may not add to the totals shown.

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table A-3a. Imputed amounts for the Academic Science and Engineering R&D Expenditures Survey at universities and colleges, by science and engineering field: FY 1994

[Dollars in millions]

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Science and engineering field	National estimate of separately budgeted R&D expenditures	Amount inflated due to weighting	Imputed amount	Imputed amount as percent of total
Total	21,081	204	7	0.0
Engineering	3,324	22	14	0.4
Physical sciences	2,171	26	25	1.2
Environmental sciences	1,426	39	59	4.1
Mathematical sciences	279	6	1	0.4
Computer sciences	660	8	0	0.1
Life sciences	11,521	74	37	0.3
Psychology	359	8	4	1.2
Social sciences	951	12	8	0.9
Other sciences	392	8	11	2.9

NOTE: Because of rounding, figures may not add to the totals shown.

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table A-3b. Federally financed imputed amounts for the Academic Science and Engineering R&D Expenditures Survey at universities and colleges, by science and engineering field: FY 1994

[Dollars in millions]

Page 1 of 1

Science and engineering field	National estimate of separately budgeted R&D expenditures	Amount inflated due to weighting	Imputed amount	Imputed amount as percent of total
Total	12,661	114	6	0.0
Engineering	1,973	15	8	0.4
Physical sciences	1,565	19	16	1.0
Environmental sciences	949	21	43	4.5
Mathematical sciences	206	5	1	0.4
Computer sciences	463	5	0	0.1
Life sciences	6,758	37	18	0.3
Psychology	243	7	4	1.8
Social sciences	359	5	4	1.2
Other sciences	145	1	2	1.3

NOTE: Because of rounding, figures may not add to the totals shown.

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table A-4. Imputed amounts for the Academic Science and Engineering R&D Expenditures Survey at universities and colleges, by source of funds: FY 1994

[Dollars in millions]

Page 1 of 1

Source of funds	National estimate of separately budgeted R&D expenditures	Amount inflated due to weighting	Imputed amount	Imputed amount as percent of total
Total	21,081	204	7	0.0
Federal Government	12,661	114	6	0.0
State and local government	1,562	13	0	0.0
Industry	1,430	13	1	0.0
Institutional funds	3,838	49	0	0.0
All other sources	1,590	15	1	0.0

NOTE: Because of rounding, figures may not add to the totals shown.

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table A-5. Standard errors of the estimates (SE) and coefficients of variation (CV) for the Academic Science and Engineering R&D Expenditures Survey at all institutions, by science and engineering field: FY 1994

[SE in thousands of dollars; CV in percent]

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Science and engineering field	Separately budgeted R&D expenditures		Federally financed R&D expenditures	
	1.96 SE	1.96 CV	1.96 SE	1.96 CV
Total	98,657	0.5	54,288	0.4
Engineering	13,913	0.4	11,200	0.6
Physical sciences	11,459	0.5	8,499	0.5
Environmental sciences	27,232	1.9	15,357	1.6
Mathematical sciences	3,735	1.3	2,922	1.4
Computer sciences	5,146	0.8	3,788	0.8
Life sciences	55,761	0.5	23,863	0.4
Psychology	5,715	1.6	5,130	2.1
Social sciences	6,141	0.6	3,137	0.9
Other sciences	5,335	1.4	1,388	1.0

NOTE: Because of rounding, figures may not add to the totals shown.

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

SECTION B.

DETAILED STATISTICAL TABLES

Note

To obtain accurate historical data, use only the latest detailed statistical tables for FY 1994 and not data published earlier. Institutions revise prior-years' data when important changes occur in reporting practices and program classifications, and only the latest tables incorporate such changes.

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[Dollars in millions]

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Fiscal year	Total	Source of funds				
		Federal Government	State and local governments	Industry	Institutional funds	All other sources
1953	255	138	37	19	35	26
1954	290	160	42	22	38	28
1955	312	169	47	25	41	30
1956	372	213	53	29	43	34
1957	410	229	60	34	49	38
1958	456	254	68	39	53	42
1959	526	306	76	39	58	47
1960	646	405	85	40	64	52
1961	763	500	95	40	70	58
1962	904	613	106	40	79	66
1963	1,081	760	118	41	89	73
1964	1,275	917	132	40	103	83
1965	1,474	1,073	143	41	124	93
1966	1,715	1,261	156	42	148	108
1967	1,921	1,409	164	48	181	119
1968	2,149	1,572	172	55	218	132
1969	2,225	1,600	197	60	223	145
1970	2,335	1,647	219	61	243	165
1971	2,500	1,724	255	70	274	177
1972	2,630	1,795	269	74	305	187
1973	2,884	1,985	295	84	318	202
1974	3,022	2,032	308	95	368	219
1975	3,409	2,288	332	113	417	259
1976	3,729	2,512	364	123	446	285
1977	4,067	2,726	374	139	514	314
1978[1]	4,625	3,059	414	170	623	359
1979	5,366	3,598	472	193	735	368
1980	6,063	4,098	491	236	835	403
1981	6,847	4,571	546	291	1,004	435
1982	7,324	4,768	616	337	1,111	491
1983	7,882	4,989	626	389	1,302	576
1984	8,620	5,431	690	475	1,411	613
1985	9,687	6,064	752	560	1,617	694
1986	10,928	6,712	915	700	1,869	732
1987	12,153	7,343	1,023	790	2,168	828
1988	13,463	8,193	1,106	872	2,356	935
1989	14,976	8,990	1,223	995	2,697	1,071
1990	16,285	9,636	1,324	1,128	3,006	1,191
1991	17,579	10,232	1,473	1,205	3,362	1,307
1992	18,807	11,090	1,491	1,280	3,538	1,409
1993	19,940	11,956	1,559	1,361	3,578	1,486
1994	21,081	12,661	1,562	1,430	3,838	1,590

[1] Fiscal year 1978 data are estimated based on data collected from doctorate-granting institutions only.

NOTE: Because of rounding, figures may not add to the totals shown.

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

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Table B-2. R&D expenditures at universities and colleges, by character of work: fiscal years 1953-94

[Dollars in millions]

Page 1 of 1

Fiscal year	Total	Character of work			
		Basic research		Applied research and development	
		Amount	Percent of total	Amount	Percent of total
1953	255	110	43.1	145	56.9
1954	290	136	46.9	154	53.1
1955	312	159	51.0	153	49.0
1956	372	200	53.8	172	46.2
1957	410	240	58.5	170	41.5
1958	456	281	61.6	175	38.4
1959	526	343	65.2	183	34.8
1960	646	433	67.0	213	33.0
1961	763	536	70.2	227	29.8
1962	904	659	72.9	245	27.1
1963	1,081	814	75.3	267	24.7
1964	1,275	1,003	78.7	272	21.3
1965	1,474	1,138	77.2	336	22.8
1966	1,715	1,303	76.0	412	24.0
1967	1,921	1,457	75.8	464	24.2
1968	2,149	1,650	76.8	499	23.2
1969	2,225	1,711	76.9	514	23.1
1970	2,335	1,796	76.9	539	23.1
1971	2,500	1,914	76.6	586	23.4
1972	2,630	2,022	76.9	608	23.1
1973	2,884	2,053	71.2	831	28.8
1974	3,022	2,153	71.2	869	28.8
1975	3,409	2,410	70.7	999	29.3
1976	3,729	2,549	68.4	1,180	31.6
1977	4,067	2,800	68.8	1,267	31.2
1978[1]	4,625	--	--	--	--
1979	5,366	3,619	67.4	1,747	32.6
1980	6,063	4,036	66.6	2,026	33.4
1981	6,847	4,594	67.1	2,253	32.9
1982	7,324	4,879	66.6	2,445	33.4
1983	7,882	5,303	67.3	2,579	32.7
1984	8,620	5,733	66.5	2,887	33.5
1985	9,687	6,556	67.7	3,131	32.3
1986	10,928	7,492	68.6	3,435	31.4
1987	12,153	8,393	69.1	3,760	30.9
1988	13,463	8,894	66.1	4,569	33.9
1989	14,976	9,790	65.4	5,186	34.6
1990	16,285	10,642	65.3	5,643	34.7
1991	17,579	11,603	66.0	5,976	34.0
1992	18,807	12,513	66.5	6,294	33.5
1993	19,940	13,302	66.7	6,638	33.3
1994	21,081	14,095	66.9	6,986	33.1

[1] Separate data for basic research and applied research and development were not collected for fiscal year 1978.

NOTES: R&D expenditures by character of work are based on estimates of basic research provided by universities and colleges.

Because of rounding, figures may not add to the totals shown.

KEY: -- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-3. R&D expenditures at universities and colleges, by source of funds and science and engineering field: fiscal years 1987-94

[Dollars in thousands]

Page 1 of 1

Source and field	1994	1993	1992	1991	1990	1989	1988	1987
Total	21,081,209	19,940,112	18,806,571	17,578,882	16,284,988	14,976,037	13,463,043	12,152,829
	Source of funds							
Federal Government	12,661,121	11,955,524	11,090,028	10,232,382	9,636,438	8,989,633	8,192,784	7,343,115
State and local governments	1,561,687	1,559,009	1,490,659	1,473,303	1,323,719	1,223,203	1,106,326	1,023,411
Industry	1,429,563	1,360,944	1,279,616	1,204,628	1,127,702	994,860	872,294	790,099
Institutional funds	3,838,338	3,578,298	3,537,637	3,361,869	3,005,737	2,697,461	2,356,142	2,168,432
All other sources	1,590,499	1,486,337	1,408,631	1,306,700	1,191,392	1,070,880	935,497	827,772
	Field							
Engineering, total	3,323,766	3,152,369	3,060,109	2,902,511	2,656,322	2,392,248	2,096,098	1,891,746
Aeronautical and astronautical	217,826	207,026	196,120	179,859	163,377	148,310	122,814	108,150
Chemical	275,850	267,712	260,930	243,996	218,175	193,672	162,514	148,361
Civil	391,847	367,292	339,414	314,976	284,263	245,151	223,847	190,679
Electrical	725,459	697,496	702,652	679,088	662,890	594,951	509,123	450,834
Mechanical	494,350	478,800	450,566	420,846	390,603	342,989	303,501	274,872
Metallurgical and materials[1]	317,847	303,941	293,946	303,621	273,524	--	--	--
Other, n.e.c.	900,588	830,102	816,481	760,125	663,490	867,175	774,299	718,850
All sciences, total	17,757,442	16,787,743	15,746,462	14,676,371	13,628,666	12,583,789	11,366,945	10,261,083
Physical sciences	2,171,202	2,126,838	2,052,965	1,939,587	1,806,954	1,647,034	1,554,099	1,398,223
Astronomy	273,606	252,103	232,986	209,911	170,429	137,316	126,764	108,429
Chemistry	759,370	736,658	697,639	666,578	647,722	606,428	565,236	513,518
Physics	942,486	928,677	912,926	869,999	841,801	785,842	739,649	673,449
Other, n.e.c.	195,740	209,400	209,414	193,099	147,002	117,448	122,450	102,827
Environmental sciences	1,425,973	1,320,402	1,239,486	1,116,369	1,067,863	1,003,354	893,814	838,879
Atmospheric	219,920	211,689	194,097	174,554	173,286	165,252	138,353	132,355
Earth sciences	458,123	415,617	412,317	383,234	354,462	323,791	294,100	283,838
Oceanography	458,595	460,783	427,836	389,840	377,386	358,666	332,895	299,482
Other, n.e.c.	289,335	232,313	205,236	168,741	162,729	155,645	128,466	123,204
Mathematical sciences	278,543	272,031	247,511	230,095	221,688	214,592	198,863	177,246
Computer sciences	659,527	606,333	555,957	554,369	514,657	472,613	408,199	372,408
Life sciences	11,520,581	10,849,679	10,196,031	9,471,947	8,725,759	8,060,875	7,257,135	6,528,560
Agricultural sciences	1,662,655	1,558,086	1,512,300	1,458,432	1,349,302	1,282,033	1,176,233	1,120,748
Biological sciences	3,759,343	3,534,872	3,303,218	3,063,548	2,858,773	2,639,684	2,407,704	2,144,079
Medical sciences	5,633,792	5,323,726	4,963,708	4,546,403	4,154,311	3,818,517	3,377,164	2,999,954
Other, n.e.c.	464,791	432,995	416,805	403,564	363,373	320,641	296,034	263,779
Psychology	358,548	349,695	328,491	283,140	252,823	233,611	213,089	187,348
Social sciences	951,112	896,337	815,339	749,941	703,070	633,269	552,170	502,251
Economics	241,379	231,244	221,551	208,809	200,588	186,868	162,991	149,375
Political science	165,499	151,084	142,095	125,056	115,327	103,353	86,659	80,985
Sociology	195,769	183,325	163,263	155,623	131,843	119,086	108,355	95,162
Other, n.e.c.	348,465	330,684	288,430	260,453	255,312	223,962	194,165	176,729
Other sciences, n.e.c.	391,957	366,428	310,682	330,923	335,852	318,441	289,576	256,168

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

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Table B-4. Federally financed R&D expenditures at universities and colleges, by science and engineering field: fiscal years 1987-94

[Dollars in thousands]

Page 1 of 1

Field	1994	1993	1992	1991	1990	1989	1988	1987
Total	12,661,121	11,955,524	11,090,028	10,232,382	9,636,438	8,989,633	8,192,784	7,343,115
Engineering, total	1,972,753	1,858,718	1,752,152	1,637,779	1,525,698	1,383,645	1,229,533	1,112,645
Aeronautical and astronautical	165,402	159,317	150,440	137,323	126,904	114,881	93,681	80,168
Chemical	150,660	140,129	126,215	117,999	110,358	100,905	85,530	76,652
Civil	158,067	152,489	143,628	123,635	116,999	102,165	102,168	89,699
Electrical	480,467	458,729	449,459	435,877	431,820	386,630	330,379	292,216
Mechanical	322,440	308,070	268,853	251,315	238,201	214,128	192,647	178,483
Metallurgical and materials[1]	156,461	154,175	143,259	153,099	139,133	--	--	--
Other, n.e.c.	539,254	485,809	470,298	418,531	362,283	464,936	425,128	395,427
All sciences, total	10,688,369	10,096,806	9,337,876	8,594,603	8,110,740	7,605,988	6,963,251	6,230,470
Physical sciences	1,565,197	1,514,179	1,476,078	1,384,201	1,315,228	1,197,680	1,157,964	1,051,491
Astronomy	182,503	158,632	153,309	134,843	112,714	87,941	83,744	71,189
Chemistry	520,178	502,124	476,388	447,538	444,902	421,957	403,189	368,285
Physics	724,031	701,733	700,219	668,510	652,116	606,137	579,590	534,797
Other, n.e.c.	138,485	151,690	146,162	133,310	105,496	81,645	91,441	77,220
Environmental sciences	949,005	870,538	790,143	699,155	680,764	650,348	589,065	545,656
Atmospheric	164,030	160,490	139,994	129,384	131,110	128,806	112,318	108,585
Earth sciences	267,457	242,546	237,812	217,005	204,497	186,777	174,483	159,486
Oceanography	325,415	331,635	306,461	263,521	262,090	259,916	238,249	217,293
Other, n.e.c.	192,103	135,867	105,876	89,245	83,067	74,849	64,015	60,292
Mathematical sciences	205,634	202,917	183,062	170,485	160,868	157,289	149,959	131,952
Computer sciences	462,958	421,955	379,779	371,549	342,321	323,833	289,129	257,263
Life sciences	6,758,287	6,385,354	5,910,653	5,418,269	5,083,276	4,783,790	4,326,499	3,836,862
Agricultural sciences	495,063	449,696	417,741	377,281	352,804	349,450	322,446	297,658
Biological sciences	2,459,306	2,309,496	2,136,919	1,950,008	1,844,230	1,736,166	1,608,398	1,419,806
Medical sciences	3,531,413	3,369,501	3,113,366	2,848,670	2,671,393	2,502,586	2,212,866	1,961,698
Other, n.e.c.	272,505	256,661	242,627	242,310	214,849	195,588	182,789	157,700
Psychology	242,547	234,382	214,900	186,280	163,805	153,081	140,465	123,893
Social sciences	359,318	338,359	281,298	252,717	226,277	212,254	188,981	168,696
Economics	75,774	77,301	65,945	59,669	54,346	54,316	49,171	43,425
Political science	51,811	42,827	35,045	28,541	25,364	25,884	25,163	24,035
Sociology	96,676	91,078	81,710	72,023	59,989	53,883	47,782	43,940
Other, n.e.c.	135,057	127,153	98,598	92,484	86,578	78,171	66,865	57,296
Other sciences, n.e.c.	145,422	129,122	101,963	111,947	138,201	127,713	121,189	114,657

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY: n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-5. Non-Federal R&D expenditures at universities and colleges, by source of funds and science and engineering field: fiscal years 1987-94

[Dollars in thousands]

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Source and field	1994	1993	1992	1991	1990	1989	1988	1987
Total	8,420,087	7,984,588	7,716,543	7,346,500	6,648,550	5,986,404	5,270,259	4,809,714
	Source of funds							
State and local governments	1,561,687	1,559,009	1,490,659	1,473,303	1,323,719	1,223,203	1,106,326	1,023,411
Industry	1,429,563	1,360,944	1,279,616	1,204,628	1,127,702	994,860	872,294	790,099
Institutional funds	3,838,338	3,578,298	3,537,637	3,361,869	3,005,737	2,697,461	2,356,142	2,168,432
All other sources	1,590,499	1,486,337	1,408,631	1,306,700	1,191,392	1,070,880	935,497	827,772
	Field							
Engineering, total	1,351,014	1,293,651	1,307,957	1,264,732	1,130,624	1,008,603	866,565	779,101
Aeronautical and astronautical	52,423	47,709	45,680	42,536	36,473	33,429	29,133	27,982
Chemical	125,190	127,583	134,715	125,997	107,817	92,767	76,984	71,709
Civil	233,780	214,803	195,786	191,341	167,264	142,986	121,679	100,980
Electrical	244,992	238,767	253,193	243,211	231,070	208,321	178,744	158,618
Mechanical	171,909	170,730	181,713	169,531	152,402	128,861	110,854	96,389
Metallurgical and materials[1]	161,386	149,766	150,687	150,522	134,391	--	--	--
Other, n.e.c.	361,334	344,293	346,183	341,594	301,207	402,239	349,171	323,423
All sciences, total	7,069,073	6,690,937	6,408,586	6,081,768	5,517,926	4,977,801	4,403,694	4,030,613
Physical sciences	606,005	612,659	576,887	555,386	491,726	449,354	396,135	346,732
Astronomy	91,104	93,471	79,677	75,068	57,715	49,375	43,020	37,240
Chemistry	239,192	234,534	221,251	219,040	202,820	184,471	162,047	145,233
Physics	218,455	226,944	212,707	201,489	189,685	179,705	160,059	138,652
Other, n.e.c.	57,254	57,710	63,252	59,789	41,506	35,803	31,009	25,607
Environmental sciences	476,967	449,864	449,343	417,214	387,099	353,006	304,749	293,223
Atmospheric	55,890	51,199	54,103	45,170	42,176	36,446	26,035	23,770
Earth sciences	190,666	173,071	174,505	166,229	149,965	137,014	119,617	124,352
Oceanography	133,180	129,148	121,375	126,319	115,296	98,750	94,646	82,189
Other, n.e.c.	97,231	96,446	99,360	79,496	79,662	80,796	64,451	62,912
Mathematical sciences	72,909	69,114	64,449	59,610	60,820	57,303	48,904	45,294
Computer sciences	196,569	184,378	176,178	182,820	172,336	148,780	119,070	115,145
Life sciences	4,762,294	4,464,325	4,285,378	4,053,678	3,642,483	3,277,085	2,930,636	2,691,698
Agricultural sciences	1,167,592	1,108,390	1,094,559	1,081,151	996,498	932,583	853,787	823,090
Biological sciences	1,300,036	1,225,376	1,166,299	1,113,540	1,014,543	903,518	799,306	724,273
Medical sciences	2,102,380	1,954,225	1,850,342	1,697,733	1,482,918	1,315,931	1,164,298	1,038,256
Other, n.e.c.	192,286	176,334	174,178	161,254	148,524	125,053	113,245	106,079
Psychology	116,000	115,313	113,591	96,860	89,018	80,530	72,624	63,455
Social sciences	591,794	557,978	534,041	497,224	476,793	421,015	363,189	333,555
Economics	165,605	153,943	155,606	149,140	146,242	132,552	113,820	105,950
Political science	113,688	108,257	107,050	96,515	89,963	77,469	61,496	56,950
Sociology	99,093	92,247	81,553	83,600	71,854	65,203	60,573	51,222
Other, n.e.c.	213,408	203,531	189,832	167,969	168,734	145,791	127,300	119,433
Other sciences, n.e.c.	246,534	237,306	208,719	218,976	197,651	190,728	168,387	141,511

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-6. R&D expenditures at doctorate-granting institutions, by source of funds and science and engineering field: fiscal years 1987-94

[Dollars in thousands]

Page 1 of 1

Source and field	1994	1993	1992	1991	1990	1989	1988	1987
Total	20,624,144	19,549,489	18,497,537	17,312,576	16,041,393	14,756,345	13,284,544	11,991,669
	Source of funds							
Federal Government	12,385,664	11,720,188	10,903,894	10,071,964	9,489,250	8,856,444	8,087,609	7,249,458
State and local governments	1,525,205	1,520,381	1,458,526	1,446,577	1,296,482	1,199,790	1,087,742	1,004,522
Industry	1,406,627	1,330,717	1,254,918	1,185,327	1,110,419	978,595	858,483	777,047
Institutional funds	3,743,808	3,515,411	3,491,234	3,319,727	2,968,557	2,664,923	2,327,268	2,143,313
All other sources	1,562,840	1,462,792	1,388,965	1,288,981	1,176,685	1,056,593	923,442	817,329
	Field							
Engineering, total	3,270,398	3,090,828	3,011,272	2,865,928	2,623,320	2,364,565	2,072,450	1,872,914
Aeronautical and astronautical	214,504	201,203	192,186	176,341	160,558	145,622	121,612	106,994
Chemical	274,323	265,654	259,133	242,434	216,564	191,835	160,384	147,077
Civil	382,100	356,249	332,500	308,548	279,523	241,241	221,431	187,709
Electrical	712,593	684,171	692,434	672,063	656,953	589,070	503,982	446,911
Mechanical	486,094	465,728	438,180	412,314	383,739	337,589	298,728	270,803
Metallurgical and materials[1]	317,367	302,553	292,721	302,912	272,943	--	--	--
Other, n.e.c.	883,417	815,270	804,118	751,316	653,040	859,208	766,313	713,420
All sciences, total	17,353,746	16,458,661	15,486,265	14,446,648	13,418,073	12,391,780	11,212,094	10,118,755
Physical sciences	2,102,894	2,059,431	1,997,498	1,890,772	1,763,273	1,608,359	1,520,628	1,367,102
Astronomy	270,712	250,878	231,898	208,907	169,539	136,552	126,037	107,840
Chemistry	720,866	699,883	666,163	638,104	623,361	584,468	547,045	496,741
Physics	918,129	901,669	891,206	852,040	824,678	771,426	726,407	661,382
Other, n.e.c.	193,187	207,001	208,231	191,721	145,695	115,913	121,139	101,139
Environmental sciences	1,343,556	1,257,911	1,193,937	1,077,664	1,030,497	970,739	865,511	809,465
Atmospheric	212,403	207,499	191,002	170,864	169,690	161,820	134,978	129,393
Earth sciences	434,018	401,896	403,008	375,852	347,638	318,428	289,271	278,188
Oceanography	417,790	425,624	402,699	368,604	357,478	340,715	318,117	284,730
Other, n.e.c.	279,345	222,892	197,228	162,344	155,691	149,776	123,145	117,154
Mathematical sciences	266,231	258,024	238,261	222,241	216,090	209,535	195,064	173,852
Computer sciences	644,728	594,737	544,327	544,672	506,233	465,244	400,626	365,471
Life sciences	11,352,536	10,734,569	10,099,997	9,385,318	8,640,519	7,979,569	7,198,313	6,481,067
Agricultural sciences	1,608,068	1,515,024	1,472,616	1,421,786	1,316,343	1,250,324	1,156,312	1,102,095
Biological sciences	3,659,241	3,476,364	3,256,319	3,022,439	2,813,948	2,597,776	2,374,963	2,119,997
Medical sciences	5,626,447	5,315,996	4,958,402	4,541,298	4,150,372	3,813,724	3,373,887	2,997,088
Other, n.e.c.	458,780	427,185	412,660	399,795	359,856	317,745	293,151	261,887
Psychology	342,728	331,898	315,714	272,037	242,593	224,996	205,786	181,134
Social sciences	923,863	869,538	793,285	729,674	688,374	619,145	539,516	488,447
Economics	235,875	225,769	216,055	203,798	198,004	184,602	160,791	147,507
Political science	160,498	148,395	140,698	123,867	114,127	102,123	85,027	79,623
Sociology	188,651	176,418	157,360	149,521	127,207	115,099	105,429	90,987
Other, n.e.c.	338,839	318,956	279,172	252,488	249,036	217,321	188,269	170,330
Other sciences, n.e.c.	377,210	352,553	303,246	324,270	330,494	314,193	286,650	252,217

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-7. Federally financed R&D expenditures at doctorate-granting institutions, by science and engineering field: fiscal years 1987-94

[Dollars in thousands]

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Field	1994	1993	1992	1991	1990	1989	1988	1987
Total	12,385,664	11,720,188	10,903,894	10,071,964	9,489,250	8,856,444	8,087,609	7,249,458
Engineering, total	1,936,914	1,824,223	1,726,956	1,617,387	1,506,452	1,367,805	1,218,071	1,103,228
Aeronautical and astronautical	162,602	153,860	146,700	133,994	124,189	112,402	92,575	79,125
Chemical	149,557	138,993	125,269	117,174	109,468	99,571	84,023	75,855
Civil	153,045	148,122	141,074	121,168	114,954	100,511	101,244	88,095
Electrical	469,629	449,961	443,089	431,831	428,209	383,343	328,240	290,544
Mechanical	316,606	300,459	261,569	245,681	233,676	210,887	189,825	176,190
Metallurgical and materials[1]	156,101	153,326	142,530	152,626	138,735	--	--	--
Other, n.e.c.	529,374	479,502	466,725	414,913	357,221	461,091	422,164	393,419
All sciences, total	10,448,750	9,895,965	9,176,938	8,454,577	7,982,798	7,488,639	6,869,538	6,146,230
Physical sciences	1,517,212	1,469,509	1,437,403	1,350,311	1,285,487	1,170,845	1,134,383	1,029,805
Astronomy	180,924	157,823	152,609	134,191	112,121	87,420	83,225	70,798
Chemistry	492,652	477,106	453,574	427,454	428,118	406,900	390,442	357,018
Physics	706,412	684,123	685,849	656,177	640,440	595,740	569,854	525,452
Other, n.e.c.	137,224	150,457	145,371	132,489	104,808	80,785	90,862	76,537
Environmental sciences	910,045	840,726	771,789	683,703	666,208	635,979	576,708	532,913
Atmospheric	158,040	157,105	137,562	126,544	128,261	125,792	109,161	105,758
Earth sciences	257,442	236,030	233,658	213,583	201,256	184,177	172,163	156,692
Oceanography	307,174	316,606	298,462	257,395	256,322	254,145	234,121	213,422
Other, n.e.c.	187,389	130,985	102,107	86,181	80,369	71,865	61,263	57,041
Mathematical sciences	196,694	194,228	177,368	165,592	157,254	153,963	147,388	129,605
Computer sciences	453,285	414,502	371,874	364,882	336,829	319,175	283,892	253,127
Life sciences	6,654,385	6,307,057	5,843,226	5,359,727	5,025,253	4,729,286	4,288,512	3,806,193
Agricultural sciences	454,214	419,617	388,158	351,071	329,008	326,052	307,639	285,085
Biological sciences	2,405,389	2,270,787	2,104,877	1,923,115	1,815,179	1,710,209	1,589,723	1,405,212
Medical sciences	3,526,787	3,364,586	3,109,857	2,845,620	2,668,744	2,499,081	2,210,467	1,959,434
Other, n.e.c.	267,995	252,067	240,334	239,921	212,322	193,944	180,683	156,462
Psychology	229,383	220,639	205,134	177,563	156,129	146,841	135,220	119,380
Social sciences	346,251	326,735	271,836	243,615	219,699	206,897	183,593	163,238
Economics	72,699	73,687	62,494	56,689	53,092	53,423	48,127	42,691
Political science	50,793	42,322	34,520	28,021	24,913	25,362	24,516	23,482
Sociology	92,671	87,581	78,391	68,602	57,388	52,059	46,413	41,675
Other, n.e.c.	130,088	123,145	96,431	90,303	84,306	76,053	64,537	55,390
Other sciences, n.e.c.	141,495	122,569	98,308	109,184	135,939	125,653	119,842	111,969

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-8. Non-Federal R&D expenditures at doctorate-granting institutions, by source of funds and science and engineering field: fiscal years 1987-94

[Dollars in thousands]

Page 1 of 1

Source and field	1994	1993	1992	1991	1990	1989	1988	1987
Total	8,238,480	7,829,301	7,593,643	7,240,612	6,552,143	5,899,901	5,196,935	4,742,211
	Source of funds							
State and local governments	1,525,205	1,520,381	1,458,526	1,446,577	1,296,482	1,199,790	1,087,742	1,004,522
Industry	1,406,627	1,330,717	1,254,918	1,185,327	1,110,419	978,595	858,483	777,047
Institutional funds	3,743,808	3,515,411	3,491,234	3,319,727	2,968,557	2,664,923	2,327,268	2,143,313
All other sources	1,562,840	1,462,792	1,388,965	1,288,981	1,176,685	1,056,593	923,442	817,329
	Field							
Engineering, total	1,333,484	1,266,605	1,284,316	1,248,541	1,116,868	996,760	854,379	769,686
Aeronautical and astronautical	51,902	47,343	45,486	42,347	36,369	33,220	29,037	27,869
Chemical	124,766	126,661	133,864	125,260	107,096	92,264	76,361	71,222
Civil	229,055	208,127	191,426	187,380	164,569	140,730	120,187	99,614
Electrical	242,964	234,210	249,345	240,232	228,744	205,727	175,742	156,367
Mechanical	169,488	165,269	176,611	166,633	150,063	126,702	108,903	94,613
Metallurgical and materials[1]	161,266	149,227	150,191	150,286	134,208	--	--	--
Other, n.e.c.	354,043	335,768	337,393	336,403	295,819	398,117	344,149	320,001
All sciences, total	6,904,996	6,562,696	6,309,327	5,992,071	5,435,275	4,903,141	4,342,556	3,972,525
Physical sciences	585,682	589,922	560,095	540,461	477,786	437,514	386,245	337,297
Astronomy	89,788	93,055	79,289	74,716	57,418	49,132	42,812	37,042
Chemistry	228,214	222,777	212,589	210,650	195,243	177,568	156,603	139,723
Physics	211,717	217,546	205,357	195,863	184,238	175,686	156,553	135,930
Other, n.e.c.	55,963	56,544	62,860	59,232	40,887	35,128	30,277	24,602
Environmental sciences	433,511	417,185	422,148	393,961	364,289	334,760	288,803	276,552
Atmospheric	54,363	50,394	53,440	44,320	41,429	36,028	25,817	23,635
Earth sciences	176,576	165,866	169,350	162,269	146,382	134,251	117,108	121,496
Oceanography	110,616	109,018	104,237	111,209	101,156	86,570	83,996	71,308
Other, n.e.c.	91,956	91,907	95,121	76,163	75,322	77,911	61,882	60,113
Mathematical sciences	69,537	63,796	60,893	56,649	58,836	55,572	47,676	44,247
Computer sciences	191,443	180,235	172,453	179,790	169,404	146,069	116,734	112,344
Life sciences	4,698,151	4,427,512	4,256,771	4,025,591	3,615,266	3,250,283	2,909,801	2,674,874
Agricultural sciences	1,153,854	1,095,407	1,084,458	1,070,715	987,335	924,272	848,673	817,010
Biological sciences	1,253,852	1,205,577	1,151,442	1,099,324	998,769	887,567	785,240	714,785
Medical sciences	2,099,660	1,951,410	1,848,545	1,695,678	1,481,628	1,314,643	1,163,420	1,037,654
Other, n.e.c.	190,785	175,118	172,326	159,874	147,534	123,801	112,468	105,425
Psychology	113,345	111,259	110,580	94,474	86,464	78,155	70,566	61,754
Social sciences	577,612	542,803	521,449	486,059	468,675	412,248	355,923	325,209
Economics	163,176	152,082	153,561	147,109	144,912	131,179	112,664	104,816
Political science	109,705	106,073	106,178	95,846	89,214	76,761	60,511	56,141
Sociology	95,980	88,837	78,969	80,919	69,819	63,040	59,016	49,312
Other, n.e.c.	208,751	195,811	182,741	162,185	164,730	141,268	123,732	114,940
Other sciences, n.e.c.	235,715	229,984	204,938	215,086	194,555	188,540	166,808	140,248

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY: n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-9. R&D expenditures at public universities and colleges, by source of funds and science and engineering field: fiscal years 1987-94

[Dollars in thousands]

Page 1 of 1

Source and field	1994	1993	1992	1991	1990	1989	1988	1987
Total	14,155,210	13,377,505	12,546,393	11,738,023	10,760,486	9,810,788	8,770,364	7,900,880
	Source of funds							
Federal Government	7,639,018	7,170,844	6,597,861	6,050,994	5,622,785	5,193,704	4,712,850	4,179,637
State and local governments	1,445,593	1,416,531	1,352,803	1,330,815	1,190,362	1,099,995	995,682	926,515
Industry	956,048	895,100	843,555	789,303	733,549	632,939	546,505	494,293
Institutional funds	3,169,149	2,982,766	2,907,464	2,784,551	2,507,773	2,246,079	1,955,897	1,802,620
All other sources	945,401	912,264	844,710	782,360	706,017	638,071	559,430	497,815
	Field							
Engineering, total	2,262,173	2,114,263	2,034,389	1,959,282	1,761,687	1,550,162	1,335,176	1,167,814
Aeronautical and astronautical	126,378	125,114	119,334	108,472	94,825	81,856	66,807	52,807
Chemical	187,973	179,715	173,121	154,365	143,080	120,640	102,300	91,988
Civil	322,988	300,166	274,003	256,853	229,018	192,697	170,322	144,496
Electrical	447,772	418,229	425,076	417,616	402,947	358,454	298,925	250,796
Mechanical	301,595	289,188	276,383	264,297	244,051	206,904	184,114	157,125
Metallurgical and materials[1]	244,964	225,566	210,856	228,370	199,757	--	--	--
Other, n.e.c.	630,503	576,285	555,616	529,309	448,009	589,611	512,708	470,602
All sciences, total	11,893,037	11,263,242	10,512,004	9,778,741	8,998,799	8,260,626	7,435,188	6,733,066
Physical sciences	1,411,031	1,379,512	1,289,356	1,219,040	1,123,569	1,014,987	936,902	836,948
Astronomy	192,614	174,596	154,264	142,843	113,828	95,944	88,361	76,175
Chemistry	513,769	499,066	466,420	442,035	415,435	389,037	362,107	330,203
Physics	565,222	572,405	559,995	527,433	509,661	464,811	424,769	380,257
Other, n.e.c.	139,425	133,445	108,677	106,729	84,645	65,195	61,665	50,313
Environmental sciences	1,125,755	1,035,156	963,965	848,680	811,728	739,916	668,515	636,098
Atmospheric	177,528	176,833	161,280	143,964	142,609	131,530	111,545	112,497
Earth sciences	352,974	314,477	309,193	283,627	260,108	232,368	212,108	207,492
Oceanography	404,858	375,762	345,501	308,159	300,488	272,739	261,763	233,217
Other, n.e.c.	190,394	168,084	147,991	112,930	108,523	103,279	83,099	82,892
Mathematical sciences	162,831	157,721	145,439	135,185	128,714	120,492	108,775	100,077
Computer sciences	329,325	292,912	284,461	293,018	249,725	209,018	170,421	167,067
Life sciences	7,638,307	7,228,643	6,769,718	6,271,015	5,725,901	5,310,584	4,768,110	4,290,105
Agricultural sciences	1,608,451	1,510,632	1,466,962	1,408,057	1,301,176	1,233,725	1,132,524	1,080,287
Biological sciences	2,384,607	2,238,055	2,067,873	1,939,785	1,779,741	1,642,556	1,491,129	1,330,471
Medical sciences	3,379,930	3,229,220	2,981,301	2,666,455	2,418,823	2,230,100	1,957,292	1,707,830
Other, n.e.c.	265,319	250,736	253,582	256,718	226,161	204,203	187,165	171,517
Psychology	249,412	242,899	226,746	195,691	169,688	156,549	140,599	123,547
Social sciences	702,995	663,814	595,555	565,819	525,336	455,947	403,440	363,746
Economics	196,739	187,138	174,563	160,828	150,156	136,931	119,609	114,249
Political science	95,999	87,963	80,652	80,369	75,908	61,304	52,467	50,104
Sociology	144,030	134,839	116,456	111,799	93,788	79,506	71,796	58,767
Other, n.e.c.	266,227	253,874	223,884	212,823	205,484	178,206	159,568	140,626
Other sciences, n.e.c.	273,382	262,585	236,764	250,293	264,138	253,133	238,426	215,478

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY: n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-10. Federally financed R&D expenditures at public universities and colleges, by science and engineering field: fiscal years 1987-94

[Dollars in thousands]

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Field	1994	1993	1992	1991	1990	1989	1988	1987
Total	7,639,018	7,170,844	6,597,861	6,050,994	5,622,785	5,193,704	4,712,850	4,179,637
Engineering, total	1,157,030	1,072,489	1,009,159	961,715	877,606	766,021	672,547	571,023
Aeronautical and astronautical	86,566	88,638	85,175	77,107	69,668	60,244	47,462	33,603
Chemical	94,401	86,518	76,363	67,900	64,589	55,077	49,409	42,710
Civil	111,967	109,805	103,035	90,134	84,597	71,120	68,518	58,724
Electrical	259,907	240,991	243,307	245,133	242,531	212,111	172,932	140,219
Mechanical	167,602	158,998	141,394	134,035	127,408	109,137	101,821	89,017
Metallurgical and materials[1]	109,506	103,425	90,226	106,545	93,564	--	--	--
Other, n.e.c.	327,080	284,114	269,659	240,861	195,249	258,332	232,405	206,750
All sciences, total	6,481,988	6,098,355	5,588,702	5,089,279	4,745,179	4,427,683	4,040,303	3,608,614
Physical sciences	920,882	892,450	841,259	781,711	740,321	666,904	629,804	567,846
Astronomy	117,297	99,237	90,094	82,895	68,263	55,261	53,198	46,780
Chemistry	329,917	319,734	299,553	275,720	266,985	256,541	244,297	222,335
Physics	385,766	390,048	388,836	364,714	355,739	321,027	296,999	270,179
Other, n.e.c.	87,901	83,431	62,776	58,382	49,334	34,075	35,310	28,552
Environmental sciences	693,785	631,228	561,389	477,049	465,770	430,157	403,189	376,387
Atmospheric	124,898	128,318	110,496	102,511	104,039	99,212	89,128	90,661
Earth sciences	183,621	160,147	153,968	135,099	123,790	111,331	106,994	96,191
Oceanography	277,506	254,167	232,437	190,583	193,490	182,444	175,252	158,049
Other, n.e.c.	107,760	88,596	64,488	48,856	44,451	37,170	31,815	31,486
Mathematical sciences	103,979	101,074	92,486	86,205	78,329	73,202	67,434	60,743
Computer sciences	192,028	166,191	160,738	162,324	125,698	109,511	94,145	91,983
Life sciences	4,042,968	3,809,649	3,510,625	3,184,473	2,950,359	2,801,602	2,530,777	2,229,485
Agricultural sciences	475,643	433,020	403,692	364,585	341,229	337,291	312,016	286,680
Biological sciences	1,420,194	1,326,075	1,214,038	1,112,941	1,028,809	981,434	904,228	798,193
Medical sciences	2,012,923	1,925,402	1,765,440	1,568,087	1,461,732	1,371,695	1,208,741	1,053,862
Other, n.e.c.	134,209	125,152	127,455	138,860	118,589	111,182	105,792	90,750
Psychology	163,306	158,305	144,852	124,118	103,448	96,354	86,841	75,993
Social sciences	253,159	243,666	199,750	187,442	166,952	145,484	128,436	109,386
Economics	63,685	66,228	55,716	49,035	44,055	41,368	35,561	32,331
Political science	23,422	22,125	17,969	15,837	14,121	12,913	12,616	12,297
Sociology	66,417	64,207	54,759	47,385	38,975	32,149	29,043	23,999
Other, n.e.c.	99,634	91,106	71,306	75,185	69,801	59,054	51,216	40,759
Other sciences, n.e.c.	111,882	95,792	77,603	85,957	114,302	104,469	99,677	96,791

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:

n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-11. Non-Federal R&D expenditures at public universities and colleges, by source of funds and science and engineering field: fiscal years 1987-94

[Dollars in thousands]

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Source and field	1994	1993	1992	1991	1990	1989	1988	1987
Total	6,516,191	6,206,661	5,948,532	5,687,029	5,137,701	4,617,084	4,057,514	3,721,243
	Source of funds							
State and local governments	1,445,593	1,416,531	1,352,803	1,330,815	1,190,362	1,099,995	995,682	926,515
Industry	956,048	895,100	843,555	789,303	733,549	632,939	546,505	494,293
Institutional funds	3,169,149	2,982,766	2,907,464	2,784,551	2,507,773	2,246,079	1,955,897	1,802,620
All other sources	945,401	912,264	844,710	782,360	706,017	638,071	559,430	497,815
	Field							
Engineering, total	1,105,143	1,041,774	1,025,230	997,567	884,081	784,141	662,629	596,791
Aeronautical and astronautical	39,812	36,476	34,159	31,365	25,157	21,612	19,345	19,204
Chemical	93,572	93,197	96,758	86,465	78,491	65,563	52,891	49,278
Civil	211,021	190,361	170,968	166,719	144,421	121,577	101,804	85,772
Electrical	187,865	177,238	181,769	172,483	160,416	146,343	125,993	110,577
Mechanical	133,993	130,190	134,989	130,262	116,643	97,767	82,293	68,108
Metallurgical and materials[1]	135,458	122,141	120,630	121,825	106,193	--	--	--
Other, n.e.c.	303,423	292,171	285,957	288,448	252,760	331,279	280,303	263,852
All sciences, total	5,411,048	5,164,887	4,923,302	4,689,462	4,253,620	3,832,943	3,394,885	3,124,452
Physical sciences	490,149	487,062	448,097	437,329	383,248	348,083	307,098	269,102
Astronomy	75,317	75,359	64,170	59,948	45,565	40,683	35,163	29,395
Chemistry	183,852	179,332	166,867	166,315	148,450	132,496	117,810	107,868
Physics	179,456	182,357	171,159	162,719	153,922	143,784	127,770	110,078
Other, n.e.c.	51,524	50,014	45,901	48,347	35,311	31,120	26,355	21,761
Environmental sciences	431,970	403,928	402,576	371,631	345,958	309,759	265,326	259,711
Atmospheric	52,630	48,515	50,784	41,453	38,570	32,318	22,417	21,836
Earth sciences	169,354	154,330	155,225	148,528	136,318	121,037	105,114	111,301
Oceanography	127,352	121,595	113,064	117,576	106,998	90,295	86,511	75,168
Other, n.e.c.	82,634	79,488	83,503	64,074	64,072	66,109	51,284	51,406
Mathematical sciences	58,851	56,647	52,953	48,980	50,385	47,290	41,341	39,334
Computer sciences	137,297	126,721	123,723	130,694	124,027	99,507	76,276	75,084
Life sciences	3,595,339	3,418,994	3,259,093	3,086,542	2,775,542	2,508,982	2,237,333	2,060,620
Agricultural sciences	1,132,808	1,077,612	1,063,270	1,043,472	959,947	896,434	820,508	793,607
Biological sciences	964,413	911,980	853,835	826,844	750,932	661,122	586,901	532,278
Medical sciences	1,367,008	1,303,818	1,215,861	1,098,368	957,091	858,405	748,551	653,968
Other, n.e.c.	131,110	125,584	126,127	117,858	107,572	93,021	81,373	80,767
Psychology	86,107	84,594	81,894	71,573	66,240	60,195	53,758	47,554
Social sciences	449,836	420,148	395,805	378,377	358,384	310,463	275,004	254,360
Economics	133,053	120,910	118,847	111,793	106,101	95,563	84,048	81,918
Political science	72,577	65,838	62,683	64,532	61,787	48,391	39,851	37,807
Sociology	77,613	70,632	61,697	64,414	54,813	47,357	42,753	34,768
Other, n.e.c.	166,593	162,768	152,578	137,638	135,683	119,152	108,352	99,867
Other sciences, n.e.c.	161,500	166,793	159,161	164,336	149,836	148,664	138,749	118,687

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY: n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-12. R&D expenditures at private universities and colleges, by source of funds and science and engineering field: fiscal years 1987-94

[Dollars in thousands]

Page 1 of 1

Source and field	1994	1993	1992	1991	1990	1989	1988	1987
Total	6,925,999	6,562,607	6,260,178	5,840,859	5,524,502	5,165,249	4,692,679	4,251,949
	Source of funds							
Federal Government	5,022,103	4,784,680	4,492,167	4,181,388	4,013,653	3,795,929	3,479,934	3,163,478
State and local governments	116,094	142,478	137,856	142,488	133,357	123,208	110,644	96,896
Industry	473,515	465,844	436,061	415,325	394,153	361,921	325,789	295,806
Institutional funds	669,189	595,532	630,173	577,318	497,964	451,382	400,245	365,812
All other sources	645,098	574,073	563,921	524,340	485,375	432,809	376,067	329,957
	Field							
Engineering, total	1,061,593	1,038,106	1,025,720	943,229	894,635	842,086	760,922	723,932
Aeronautical and astronautical	91,447	81,912	76,786	71,387	68,552	66,454	56,007	55,343
Chemical	87,877	87,997	87,809	89,631	75,095	73,032	60,214	56,373
Civil	68,859	67,126	65,411	58,123	55,245	52,454	53,525	46,183
Electrical	277,687	279,267	277,576	261,472	259,943	236,497	210,198	200,038
Mechanical	192,755	189,612	174,183	156,549	146,552	136,085	119,387	117,747
Metallurgical and materials[1]	72,883	78,375	83,090	75,251	73,767	--	--	--
Other, n.e.c.	270,085	253,817	260,865	230,816	215,481	277,564	261,591	248,248
All sciences, total	5,864,406	5,524,501	5,234,458	4,897,630	4,629,867	4,323,163	3,931,757	3,528,017
Physical sciences	760,172	747,326	763,609	720,547	683,385	632,047	617,197	561,275
Astronomy	80,992	77,507	78,722	67,068	56,601	41,372	38,403	32,254
Chemistry	245,601	237,592	231,219	224,543	232,287	217,391	203,129	183,315
Physics	377,264	356,272	352,931	342,566	332,140	321,031	314,880	293,192
Other, n.e.c.	56,315	75,955	100,737	86,370	62,357	52,253	60,785	52,514
Environmental sciences	300,218	285,246	275,521	267,689	256,135	263,438	225,299	202,781
Atmospheric	42,392	34,856	32,817	30,590	30,677	33,722	26,808	19,858
Earth sciences	105,149	101,140	103,124	99,607	94,354	91,423	81,992	76,346
Oceanography	53,737	85,021	82,335	81,681	76,898	85,927	71,132	66,265
Other, n.e.c.	98,940	64,229	57,245	55,811	54,206	52,366	45,367	40,312
Mathematical sciences	115,712	114,310	102,072	94,910	92,974	94,100	90,088	77,169
Computer sciences	330,202	313,421	271,496	261,351	264,932	263,595	237,778	205,341
Life sciences	3,882,274	3,621,036	3,426,313	3,200,932	2,999,858	2,750,291	2,489,025	2,238,455
Agricultural sciences	54,204	47,454	45,338	50,375	48,126	48,308	43,709	40,461
Biological sciences	1,374,736	1,296,817	1,235,345	1,123,763	1,079,032	997,128	916,575	813,608
Medical sciences	2,253,862	2,094,506	1,982,407	1,879,948	1,735,488	1,588,417	1,419,872	1,292,124
Other, n.e.c.	199,472	182,259	163,223	146,846	137,212	116,438	108,869	92,262
Psychology	109,135	106,796	101,745	87,449	83,135	77,062	72,490	63,801
Social sciences	248,118	232,523	219,784	184,122	177,734	177,322	148,730	138,505
Economics	44,640	44,106	46,988	47,981	50,432	49,937	43,382	35,126
Political science	69,500	63,121	61,443	44,687	39,419	42,049	34,192	30,881
Sociology	51,739	48,486	46,807	43,824	38,055	39,580	36,559	36,395
Other, n.e.c.	82,239	76,810	64,546	47,630	49,828	45,756	34,597	36,103
Other sciences, n.e.c.	118,575	103,843	73,918	80,630	71,714	65,308	51,150	40,690

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
n.e.c = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-13. Federally financed R&D expenditures at private universities and colleges, by science and engineering field: fiscal years 1987-94

[Dollars in thousands]

Page 1 of 1

Field	1994	1993	1992	1991	1990	1989	1988	1987
Total	5,022,103	4,784,680	4,492,167	4,181,388	4,013,653	3,795,929	3,479,934	3,163,478
Engineering, total	815,723	786,229	742,993	676,064	648,092	617,624	556,986	541,622
Aeronautical and astronautical	78,836	70,679	65,265	60,216	57,236	54,637	46,219	46,565
Chemical	56,259	53,611	49,852	50,099	45,769	45,828	36,121	33,942
Civil	46,100	42,684	40,593	33,501	32,402	31,045	33,650	30,975
Electrical	220,560	217,738	206,152	190,744	189,289	174,519	157,447	151,997
Mechanical	154,838	149,072	127,459	117,280	110,793	104,991	90,826	89,466
Metallurgical and materials[1]	46,955	50,750	53,033	46,554	45,569	--	--	--
Other, n.e.c.	212,174	201,695	200,639	177,670	167,034	206,604	192,723	188,677
All sciences, total	4,206,381	3,998,451	3,749,174	3,505,324	3,365,561	3,178,305	2,922,948	2,621,856
Physical sciences	644,315	621,729	634,819	602,490	574,907	530,776	528,160	483,645
Astronomy	65,205	59,395	63,215	51,948	44,451	32,680	30,546	24,409
Chemistry	190,261	182,390	176,835	171,818	177,917	165,416	158,892	145,950
Physics	338,265	311,685	311,383	303,796	296,377	285,110	282,591	264,618
Other, n.e.c.	50,584	68,259	83,386	74,928	56,162	47,570	56,131	48,668
Environmental sciences	255,221	239,310	228,754	222,106	214,994	220,191	185,876	169,269
Atmospheric	39,133	32,172	29,498	26,873	27,071	29,594	23,190	17,924
Earth sciences	83,836	82,399	83,844	81,906	80,707	75,446	67,489	63,295
Oceanography	47,909	77,468	74,024	72,938	68,600	77,472	62,997	59,244
Other, n.e.c.	84,343	47,271	41,388	40,389	38,616	37,679	32,200	28,806
Mathematical sciences	101,655	101,843	90,576	84,280	82,539	84,087	82,525	71,209
Computer sciences	270,930	255,764	219,041	209,225	216,623	214,322	194,984	165,280
Life sciences	2,715,319	2,575,705	2,400,028	2,233,796	2,132,917	1,982,188	1,795,722	1,607,377
Agricultural sciences	19,421	16,676	14,049	12,696	11,575	12,159	10,430	10,978
Biological sciences	1,039,112	983,421	922,881	837,067	815,421	754,732	704,170	621,613
Medical sciences	1,518,490	1,444,099	1,347,926	1,280,583	1,209,661	1,130,891	1,004,125	907,836
Other, n.e.c.	138,296	131,509	115,172	103,450	96,260	84,406	76,997	66,950
Psychology	79,241	76,077	70,048	62,162	60,357	56,727	53,624	47,900
Social sciences	106,159	94,693	81,548	65,275	59,325	66,770	60,545	59,310
Economics	12,088	11,073	10,229	10,634	10,291	12,948	13,610	11,094
Political science	28,388	20,702	17,076	12,704	11,243	12,971	12,547	11,738
Sociology	30,259	26,871	26,951	24,638	21,014	21,734	18,739	19,941
Other, n.e.c.	35,424	36,047	27,292	17,299	16,777	19,117	15,649	16,537
Other sciences, n.e.c.	33,540	33,330	24,360	25,990	23,899	23,244	21,512	17,866

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY: n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

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Table B-14. Non-Federal R&D expenditures at private universities and colleges, by source of funds and science and engineering field: fiscal years 1987-94

[Dollars in thousands]

Page 1 of 1

Source and field	1994	1993	1992	1991	1990	1989	1988	1987
Total	1,903,896	1,777,927	1,768,011	1,659,471	1,510,849	1,369,320	1,212,745	1,088,471
	Source of funds							
State and local governments	116,094	142,478	137,856	142,488	133,357	123,208	110,644	96,896
Industry	473,515	465,844	436,061	415,325	394,153	361,921	325,789	295,806
Institutional funds	669,189	595,532	630,173	577,318	497,964	451,382	400,245	365,812
All other sources	645,098	574,073	563,921	524,340	485,375	432,809	376,067	329,957
	Field							
Engineering, total	245,871	251,877	282,727	267,165	246,543	224,462	203,936	182,310
Aeronautical and astronautical	12,611	11,233	11,521	11,171	11,316	11,817	9,788	8,778
Chemical	31,618	34,386	37,957	39,532	29,326	27,204	24,093	22,431
Civil	22,759	24,442	24,818	24,622	22,843	21,409	19,875	15,208
Electrical	57,127	61,529	71,424	70,728	70,654	61,978	52,751	48,041
Mechanical	37,917	40,540	46,724	39,269	35,759	31,094	28,561	28,281
Metallurgical and materials[1]	25,928	27,625	30,057	28,697	28,198	--	--	--
Other, n.e.c.	57,911	52,122	60,226	53,146	48,447	70,960	68,868	59,571
All sciences, total	1,658,025	1,526,050	1,485,284	1,392,306	1,264,306	1,144,858	1,008,809	906,161
Physical sciences	115,856	125,597	128,790	118,057	108,478	101,271	89,037	77,630
Astronomy	15,787	18,112	15,507	15,120	12,150	8,692	7,857	7,845
Chemistry	55,340	55,202	54,384	52,725	54,370	51,975	44,237	37,365
Physics	38,999	44,587	41,548	38,770	35,763	35,921	32,289	28,574
Other, n.e.c.	5,731	7,696	17,351	11,442	6,195	4,683	4,654	3,846
Environmental sciences	44,997	45,936	46,767	45,583	41,141	43,247	39,423	33,512
Atmospheric	3,259	2,684	3,319	3,717	3,606	4,128	3,618	1,934
Earth sciences	21,312	18,741	19,280	17,701	13,647	15,977	14,503	13,051
Oceanography	5,828	7,553	8,311	8,743	8,298	8,455	8,135	7,021
Other, n.e.c.	14,597	16,958	15,857	15,422	15,590	14,687	13,167	11,506
Mathematical sciences	14,058	12,467	11,496	10,630	10,435	10,013	7,563	5,960
Computer sciences	59,272	57,657	52,455	52,126	48,309	49,273	42,794	40,061
Life sciences	1,166,955	1,045,331	1,026,285	967,136	866,941	768,103	693,303	631,078
Agricultural sciences	34,784	30,778	31,289	37,679	36,551	36,149	33,279	29,483
Biological sciences	335,623	313,396	312,464	286,696	263,611	242,396	212,405	191,995
Medical sciences	735,372	650,407	634,481	599,365	525,827	457,526	415,747	384,288
Other, n.e.c.	61,176	50,750	48,051	43,396	40,952	32,032	31,872	25,312
Psychology	29,894	30,719	31,697	25,287	22,778	20,335	18,866	15,901
Social sciences	141,958	137,830	138,236	118,847	118,409	110,552	88,185	79,195
Economics	32,552	33,033	36,759	37,347	40,141	36,989	29,772	24,032
Political science	41,112	42,419	44,367	31,983	28,176	29,078	21,645	19,143
Sociology	21,480	21,615	19,856	19,186	17,041	17,846	17,820	16,454
Other, n.e.c.	46,815	40,763	37,254	30,331	33,051	26,639	18,948	19,566
Other sciences, n.e.c.	85,034	70,513	49,558	54,640	47,815	42,064	29,638	22,824

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-15. R&D expenditures at doctorate-granting institutions, by source of funds, science and engineering field, and control: fiscal years 1987, 1993, and 1994

[Dollars in thousands]

Page 1 of 1

Source and field	Total			Public			Private		
	1994	1993	1987	1994	1993	1987	1994	1993	1987
Total	20,624,144	19,549,489	11,991,669	13,792,118	13,068,940	7,775,049	6,832,026	6,480,549	4,216,620
	Source of funds								
Federal Government	12,385,664	11,720,188	7,249,458	7,428,445	6,986,467	4,107,918	4,957,219	4,733,721	3,141,540
State and local governments	1,525,205	1,520,381	1,004,522	1,410,152	1,379,721	908,657	115,053	140,660	95,865
Industry	1,406,627	1,330,717	777,047	938,629	873,134	485,611	467,998	457,583	291,436
Institutional funds	3,743,808	3,515,411	2,143,313	3,085,078	2,933,188	1,781,730	658,730	582,223	361,583
All other sources	1,562,840	1,462,792	817,329	929,814	896,430	491,133	633,026	566,362	326,196
	Field								
Engineering, total	3,270,398	3,090,828	1,872,914	2,220,919	2,062,048	1,153,985	1,049,479	1,028,780	718,929
Aeronautical and astronautical	214,504	201,203	106,994	123,398	119,418	51,894	91,106	81,785	55,100
Chemical	274,323	265,654	147,077	186,608	178,152	90,999	87,715	87,502	56,078
Civil	382,100	356,249	187,709	315,899	289,696	143,205	66,201	66,553	44,504
Electrical	712,593	684,171	446,911	437,360	406,345	248,086	275,233	277,826	198,825
Mechanical	486,094	465,728	270,803	294,612	279,151	154,058	191,482	186,577	116,745
Metallurgical and materials[1]	317,367	302,553	--	244,671	224,497	--	72,696	78,056	--
Other, n.e.c.	883,417	815,270	713,420	618,371	564,789	465,743	265,046	250,481	247,677
All sciences, total	17,353,746	16,458,661	10,118,755	11,571,199	11,006,892	6,621,064	5,782,547	5,451,769	3,497,691
Physical sciences	2,102,894	2,059,431	1,367,102	1,363,550	1,332,910	814,037	739,344	726,521	553,065
Astronomy	270,712	250,878	107,840	191,786	174,083	76,010	78,926	76,795	31,830
Chemistry	720,866	699,883	496,741	486,443	473,922	317,543	234,423	225,961	179,198
Physics	918,129	901,669	661,382	548,056	553,275	371,727	370,073	348,394	289,655
Other, n.e.c.	193,187	207,001	101,139	137,265	131,630	48,757	55,922	75,371	52,382
Environmental sciences	1,343,556	1,257,911	809,465	1,051,220	976,641	610,591	292,336	281,270	198,874
Atmospheric	212,403	207,499	129,393	175,793	174,386	111,585	36,610	33,113	17,808
Earth sciences	434,018	401,896	278,188	330,214	301,878	202,955	103,804	100,018	75,233
Oceanography	417,790	425,624	284,730	364,429	340,824	219,102	53,361	84,800	65,628
Other, n.e.c.	279,345	222,892	117,154	180,784	159,553	76,949	98,561	63,339	40,205
Mathematical sciences	266,231	258,024	173,852	155,253	147,265	97,471	110,978	110,759	76,381
Computer sciences	644,728	594,737	365,471	319,055	283,027	161,728	325,673	311,710	203,743
Life sciences	11,352,536	10,734,569	6,481,067	7,497,009	7,140,837	4,252,560	3,855,527	3,593,732	2,228,507
Agricultural sciences	1,608,068	1,515,024	1,102,095	1,557,904	1,469,970	1,062,674	50,164	45,054	39,421
Biological sciences	3,659,241	3,476,364	2,119,997	2,303,139	2,199,689	1,313,473	1,356,102	1,276,675	806,524
Medical sciences	5,626,447	5,315,996	2,997,088	3,376,421	3,224,837	1,705,910	2,250,026	2,091,159	1,291,178
Other, n.e.c.	458,780	427,185	261,887	259,545	246,341	170,503	199,235	180,844	91,384
Psychology	342,728	331,898	181,134	241,129	230,651	119,397	101,599	101,247	61,737
Social sciences	923,863	869,538	488,447	682,270	641,343	353,148	241,593	228,195	135,299
Economics	235,875	225,769	147,507	191,719	182,395	112,922	44,156	43,374	34,585
Political science	160,498	148,395	79,623	93,513	86,199	49,202	66,985	62,196	30,421
Sociology	188,651	176,418	90,987	139,552	129,919	56,255	49,099	46,499	34,732
Other, n.e.c.	338,839	318,956	170,330	257,486	242,830	134,769	81,353	76,126	35,561
Other sciences, n.e.c.	377,210	352,553	252,217	261,713	254,218	212,132	115,497	98,335	40,085

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-16. Federally financed R&D expenditures at doctorate-granting institutions, by science and engineering field and control: fiscal years 1987, 1993, and 1994

[Dollars in thousands]

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Field	Total			Public			Private		
	1994	1993	1987	1994	1993	1987	1994	1993	1987
Total	12,385,664	11,720,188	7,249,458	7,428,445	6,986,467	4,107,918	4,957,219	4,733,721	3,141,540
Engineering, total	1,936,914	1,824,223	1,103,228	1,129,415	1,041,792	564,007	807,499	782,431	539,221
Aeronautical and astronautical	162,602	153,860	79,125	83,766	83,217	32,786	78,836	70,643	46,339
Chemical	149,557	138,993	75,855	93,455	85,602	42,001	56,102	53,391	33,854
Civil	153,045	148,122	88,095	109,603	105,642	58,480	43,442	42,480	29,615
Electrical	469,629	449,961	290,544	251,088	232,768	138,829	218,541	217,193	151,715
Mechanical	316,606	300,459	176,190	162,929	152,183	87,028	153,677	148,276	89,162
Metallurgical and materials[1]	156,101	153,326	--	109,275	102,606	--	46,826	50,720	--
Other, n.e.c.	529,374	479,502	393,419	319,299	279,774	204,883	210,075	199,728	188,536
All sciences, total	10,448,750	9,895,965	6,146,230	6,299,030	5,944,675	3,543,911	4,149,720	3,951,290	2,602,319
Physical sciences	1,517,212	1,469,509	1,029,805	887,849	859,997	551,206	629,363	609,512	478,599
Astronomy	180,924	157,823	70,798	116,585	98,863	46,743	64,339	58,960	24,055
Chemistry	492,652	477,106	357,018	310,114	300,813	213,122	182,538	176,293	143,896
Physics	706,412	684,123	525,452	374,137	377,995	263,461	332,275	306,128	261,991
Other, n.e.c.	137,224	150,457	76,537	87,013	82,326	27,880	50,211	68,131	48,657
Environmental sciences	910,045	840,726	532,913	661,437	604,468	366,211	248,608	236,258	166,702
Atmospheric	158,040	157,105	105,758	124,415	126,672	89,881	33,625	30,433	15,877
Earth sciences	257,442	236,030	156,692	174,386	154,269	93,890	83,056	81,761	62,802
Oceanography	307,174	316,606	213,422	259,512	239,257	154,201	47,662	77,349	59,221
Other, n.e.c.	187,389	130,985	57,041	103,124	84,270	28,239	84,265	46,715	28,802
Mathematical sciences	196,694	194,228	129,605	98,279	94,674	58,881	98,415	99,554	70,724
Computer sciences	453,285	414,502	253,127	186,357	159,750	88,346	266,928	254,752	164,781
Life sciences	6,654,385	6,307,057	3,806,193	3,957,785	3,750,195	2,206,052	2,696,600	2,556,862	1,600,141
Agricultural sciences	454,214	419,617	285,085	438,655	405,202	275,095	15,559	14,415	9,990
Biological sciences	2,405,389	2,270,787	1,405,212	1,378,478	1,300,505	788,353	1,026,911	970,282	616,859
Medical sciences	3,526,787	3,364,586	1,959,434	2,010,720	1,922,845	1,052,363	1,516,067	1,441,741	907,071
Other, n.e.c.	267,995	252,067	156,462	129,932	121,643	90,241	138,063	130,424	66,221
Psychology	229,383	220,639	119,380	156,704	148,959	73,037	72,679	71,680	46,343
Social sciences	346,251	326,735	163,238	242,523	233,827	105,913	103,728	92,908	57,325
Economics	72,699	73,687	42,691	60,752	62,833	31,828	11,947	10,854	10,863
Political science	50,793	42,322	23,482	22,680	21,733	11,983	28,113	20,589	11,499
Sociology	92,671	87,581	41,675	63,882	62,017	23,001	28,789	25,564	18,674
Other, n.e.c.	130,088	123,145	55,390	95,209	87,244	39,101	34,879	35,901	16,289
Other sciences, n.e.c.	141,495	122,569	111,969	108,096	92,805	94,265	33,399	29,764	17,704

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990

NOTE: Because of rounding, figures may not add to the totals shown

KEY:
n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-17. Non-Federal R&D expenditures at doctorate-granting institutions, by source of funds, science and engineering field, and control: fiscal years 1987, 1993, and 1994

[Dollars in thousands]

Page 1 of 1

Source and field	Total			Public			Private		
	1994	1993	1987	1994	1993	1987	1994	1993	1987
Total	8,238,480	7,829,301	4,742,211	6,363,673	6,082,473	3,667,131	1,874,807	1,746,828	1,075,080
	Source of funds								
State and local governments	1,525,205	1,520,381	1,004,522	1,410,152	1,379,721	908,657	115,053	140,660	95,865
Industry	1,406,627	1,330,717	777,047	938,629	873,134	485,611	467,998	457,583	291,436
Institutional funds	3,743,808	3,515,411	2,143,313	3,085,078	2,933,188	1,781,730	658,730	582,223	361,583
All other sources	1,562,840	1,462,792	817,329	929,814	896,430	491,133	633,026	566,362	326,196
	Field								
Engineering, total	1,333,484	1,266,605	769,686	1,091,504	1,020,256	589,978	241,980	246,349	179,708
Aeronautical and astronautical	51,902	47,343	27,869	39,632	36,201	19,108	12,270	11,142	8,761
Chemical	124,766	126,661	71,222	93,153	92,550	48,998	31,613	34,111	22,224
Civil	229,055	208,127	99,614	206,296	184,054	84,725	22,759	24,073	14,889
Electrical	242,964	234,210	156,367	186,272	173,577	109,257	56,692	60,633	47,110
Mechanical	169,488	165,269	94,613	131,683	126,968	67,030	37,805	38,301	27,583
Metallurgical and materials[1]	161,266	149,227	--	135,396	121,891	--	25,870	27,336	--
Other, n.e.c.	354,043	335,768	320,001	299,072	285,015	260,860	54,971	50,753	59,141
All sciences, total	6,904,996	6,562,696	3,972,525	5,272,169	5,062,217	3,077,153	1,632,827	1,500,479	895,372
Physical sciences	585,682	589,922	337,297	475,701	472,913	262,831	109,981	117,009	74,466
Astronomy	89,788	93,055	37,042	75,201	75,220	29,267	14,587	17,835	7,775
Chemistry	228,214	222,777	139,723	176,329	173,109	104,421	51,885	49,668	35,302
Physics	211,717	217,546	135,930	173,919	175,280	108,266	37,798	42,266	27,664
Other, n.e.c.	55,963	56,544	24,602	50,252	49,304	20,877	5,711	7,240	3,725
Environmental sciences	433,511	417,185	276,552	389,783	372,173	244,380	43,728	45,012	32,172
Atmospheric	54,363	50,394	23,635	51,378	47,714	21,704	2,985	2,680	1,931
Earth sciences	176,576	165,866	121,496	155,828	147,609	109,065	20,748	18,257	12,431
Oceanography	110,616	109,018	71,308	104,917	101,567	64,901	5,699	7,451	6,407
Other, n.e.c.	91,956	91,907	60,113	77,660	75,283	48,710	14,296	16,624	11,403
Mathematical sciences	69,537	63,796	44,247	56,974	52,591	38,590	12,563	11,205	5,657
Computer sciences	191,443	180,235	112,344	132,698	123,277	73,382	58,745	56,958	38,962
Life sciences	4,698,151	4,427,512	2,674,874	3,539,224	3,390,642	2,046,508	1,158,927	1,036,870	628,366
Agricultural sciences	1,153,854	1,095,407	817,010	1,119,249	1,064,768	787,579	34,605	30,639	29,431
Biological sciences	1,253,852	1,205,577	714,785	924,661	899,184	525,120	329,191	306,393	189,665
Medical sciences	2,099,660	1,951,410	1,037,654	1,365,701	1,301,992	653,547	733,959	649,418	384,107
Other, n.e.c.	190,785	175,118	105,425	129,613	124,698	80,262	61,172	50,420	25,163
Psychology	113,345	111,259	61,754	84,425	81,692	46,360	28,920	29,567	15,394
Social sciences	577,612	542,803	325,209	439,747	407,516	247,235	137,865	135,287	77,974
Economics	163,176	152,082	104,816	130,967	119,562	81,094	32,209	32,520	23,722
Political science	109,705	106,073	56,141	70,833	64,466	37,219	38,872	41,607	18,922
Sociology	95,980	88,837	49,312	75,670	67,902	33,254	20,310	20,935	16,058
Other, n.e.c.	208,751	195,811	114,940	162,277	155,586	95,668	46,474	40,225	19,272
Other sciences, n.e.c.	235,715	229,984	140,248	153,617	161,413	117,867	82,098	68,571	22,381

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-18. R&D expenditures at historically black colleges and universities, by source of funds and science and engineering field: fiscal years 1987-94

[Dollars in thousands]

Page 1 of 1

Source and field	1994	1993	1992	1991	1990	1989	1988	1987
Total	211,439	191,369	178,777	150,763	142,478	130,939	93,818	74,822
	Source of funds							
Federal Government	174,561	157,207	146,624	122,682	116,827	106,759	75,998	61,572
State and local governments	9,533	8,577	9,053	6,505	6,902	6,883	4,475	2,528
Industry	6,724	4,796	4,145	3,230	5,353	3,966	3,292	1,637
Institutional funds	17,187	17,716	14,977	14,062	11,442	12,086	8,392	7,884
All other sources	3,434	3,073	3,978	4,284	1,954	1,245	1,661	1,201
	Field							
Engineering, total	26,906	21,149	20,733	16,889	13,555	10,529	7,814	6,400
Aeronautical and astronautical	1,553	324	423	170	119	226	410	371
Chemical	1,355	1,360	1,114	1,171	727	660	607	184
Civil	2,838	2,503	2,475	1,231	1,022	1,198	1,340	906
Electrical	6,842	4,360	4,144	4,133	2,560	2,763	1,915	2,123
Mechanical	7,438	6,860	7,142	4,484	3,612	3,108	2,224	1,912
Metallurgical and materials[1]	190	58	245	1,345	1,375	--	--	--
Other, n.e.c.	6,690	5,684	5,190	4,355	4,140	2,574	1,318	904
All sciences, total	184,533	170,220	158,044	133,874	128,923	120,410	86,004	68,422
Physical sciences	39,458	32,380	29,205	25,410	26,058	21,133	14,350	13,717
Astronomy	241	244	367	164	--	--	27	12
Chemistry	13,715	13,551	11,896	11,705	12,469	12,111	9,332	7,828
Physics	24,915	17,727	16,534	13,067	13,329	8,856	4,990	5,749
Other, n.e.c.	587	858	408	474	260	166	1	128
Environmental sciences	6,087	3,853	3,252	3,844	4,203	2,642	2,401	2,111
Atmospheric	732	1,310	667	542	625	388	3	--
Earth sciences	507	39	592	127	461	526	328	303
Oceanography	653	245	106	27	48	27	397	208
Other, n.e.c.	4,195	2,259	1,887	3,148	3,069	1,701	1,673	1,600
Mathematical sciences	3,589	5,631	4,375	2,420	1,013	728	244	311
Computer sciences	5,020	4,686	4,170	5,373	2,664	2,426	1,223	895
Life sciences	114,743	106,870	105,159	88,031	83,948	82,691	57,828	44,679
Agricultural sciences	51,099	46,235	45,225	39,154	33,608	34,112	22,148	18,538
Biological sciences	45,477	41,710	44,126	36,269	37,809	36,439	25,822	16,573
Medical sciences	15,428	16,364	12,981	10,445	11,766	11,024	8,998	8,514
Other, n.e.c.	2,739	2,561	2,827	2,163	765	1,116	860	1,054
Psychology	3,580	3,326	2,053	1,336	1,706	1,494	494	628
Social sciences	8,914	9,917	8,528	6,133	7,810	8,032	8,536	4,488
Economics	2,741	3,190	2,847	2,404	1,528	864	838	290
Political science	549	513	371	166	1,028	1,200	1,095	651
Sociology	3,162	2,581	2,469	2,373	2,039	1,673	2,059	649
Other, n.e.c.	2,462	3,633	2,841	1,190	3,215	4,295	4,544	2,898
Other sciences, n.e.c.	3,142	3,557	1,302	1,327	1,521	1,264	928	1,593

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-19. Federally financed R&D expenditures at historically black colleges and universities, by science and engineering field: fiscal years 1987-94

[Dollars in thousands]

Page 1 of 1

Field	1994	1993	1992	1991	1990	1989	1988	1987
Total	174,561	157,207	146,624	122,682	116,827	106,759	75,998	61,572
Engineering, total	21,746	15,901	16,034	12,295	11,772	8,008	5,665	4,331
Aeronautical and astronautical	1,420	324	423	170	119	123	382	350
Chemical	1,091	1,086	852	791	438	586	554	123
Civil	1,941	1,340	1,314	278	647	880	811	585
Electrical	5,707	3,781	3,446	3,173	2,096	1,906	1,358	1,381
Mechanical	6,237	5,314	5,467	3,616	3,304	2,787	1,964	1,480
Metallurgical and materials[1]	101	58	245	1,178	1,375	--	--	--
Other, n.e.c.	5,249	3,998	4,287	3,089	3,793	1,726	596	412
All sciences, total	152,815	141,306	130,590	110,387	105,055	98,751	70,333	57,241
Physical sciences	32,337	27,472	24,491	21,494	21,742	17,706	11,940	11,756
Astronomy	241	244	367	164	--	--	27	12
Chemistry	11,682	12,256	11,043	10,359	10,740	10,292	7,633	6,347
Physics	19,873	14,377	12,685	10,553	10,807	7,291	4,279	5,269
Other, n.e.c.	541	595	396	418	195	123	1	128
Environmental sciences	4,377	2,847	1,972	2,028	1,447	1,408	1,641	1,392
Atmospheric	236	832	212	104	105	129	3	--
Earth sciences	37	32	506	96	252	248	250	239
Oceanography	150	212	74	1	22	2	372	206
Other, n.e.c.	3,954	1,771	1,180	1,827	1,068	1,029	1,016	947
Mathematical sciences	2,928	3,276	2,816	1,468	676	486	188	269
Computer sciences	4,217	4,138	3,533	4,581	2,119	2,037	1,088	801
Life sciences	97,711	93,379	90,538	74,910	72,186	71,316	50,360	38,740
Agricultural sciences	44,511	40,019	40,212	34,105	29,139	30,388	21,039	16,774
Biological sciences	39,418	38,201	39,395	32,831	33,441	31,651	21,825	14,865
Medical sciences	12,271	13,603	10,024	6,991	9,341	8,902	6,641	6,065
Other, n.e.c.	1,511	1,556	907	983	265	375	855	1,036
Psychology	2,930	3,050	1,597	1,263	1,240	1,108	452	589
Social sciences	6,477	5,527	4,784	4,219	4,872	3,649	3,932	2,238
Economics	2,595	2,833	2,570	2,137	1,296	755	548	203
Political science	274	107	167	90	433	566	438	364
Sociology	2,110	1,627	1,478	1,488	652	442	185	162
Other, n.e.c.	1,498	960	569	504	2,491	1,886	2,761	1,509
Other sciences, n.e.c.	1,838	1,617	859	424	773	1,041	732	1,456

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-20. Non-Federal R&D expenditures at historically black colleges and universities, by source of funds and science and engineering field: fiscal years 1987-94

[Dollars in thousands]

Page 1 of 1

Source and field	1994	1993	1992	1991	1990	1989	1988	1987
Total	36,878	34,162	32,153	28,081	25,651	24,180	17,820	13,250
	Source of funds							
State and local governments	9,533	8,577	9,053	6,505	6,902	6,883	4,475	2,528
Industry	6,724	4,796	4,145	3,230	5,353	3,966	3,292	1,637
Institutional funds	17,187	17,716	14,977	14,062	11,442	12,086	8,392	7,884
All other sources	3,434	3,073	3,978	4,284	1,954	1,245	1,661	1,201
	Field							
Engineering, total	5,160	5,248	4,699	4,594	1,783	2,521	2,149	2,069
Aeronautical and astronautical	133	--	--	--	--	103	28	21
Chemical	264	274	262	380	289	74	53	61
Civil	897	1,163	1,161	953	375	318	529	321
Electrical	1,135	579	698	960	464	857	557	742
Mechanical	1,201	1,546	1,675	868	308	321	260	432
Metallurgical and materials[1]	89	--	--	167	--	--	--	--
Other, n.e.c.	1,441	1,686	903	1,266	347	848	722	492
All sciences, total	31,718	28,914	27,454	23,487	23,868	21,659	15,671	11,181
Physical sciences	7,121	4,908	4,714	3,916	4,316	3,427	2,410	1,961
Astronomy	0	0	0	0	0	0	0	0
Chemistry	2,033	1,295	853	1,346	1,729	1,819	1,699	1,481
Physics	5,042	3,350	3,849	2,514	2,522	1,565	711	480
Other, n.e.c.	46	263	12	56	65	43	--	--
Environmental sciences	1,710	1,006	1,280	1,816	2,756	1,234	760	719
Atmospheric	496	478	455	438	520	259	--	--
Earth sciences	470	7	86	31	209	278	78	64
Oceanography	503	33	32	26	26	25	25	2
Other, n.e.c.	241	488	707	1,321	2,001	672	657	653
Mathematical sciences	661	2,355	1,559	952	337	242	56	42
Computer sciences	803	548	637	792	545	389	135	94
Life sciences	17,032	13,491	14,621	13,121	11,762	11,375	7,468	5,939
Agricultural sciences	6,588	6,216	5,013	5,049	4,469	3,724	1,109	1,764
Biological sciences	6,059	3,509	4,731	3,438	4,368	4,788	3,997	1,708
Medical sciences	3,157	2,761	2,957	3,454	2,425	2,122	2,357	2,449
Other, n.e.c.	1,228	1,005	1,920	1,180	500	741	5	18
Psychology	650	276	456	73	466	386	42	39
Social sciences	2,437	4,390	3,744	1,914	2,938	4,383	4,604	2,250
Economics	146	357	277	267	232	109	290	87
Political science	275	406	204	76	595	634	657	287
Sociology	1,052	954	991	885	1,387	1,231	1,874	487
Other, n.e.c.	964	2,673	2,272	686	724	2,409	1,783	1,389
Other sciences, n.e.c.	1,304	1,940	443	903	748	223	196	137

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY: n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-21. R&D expenditures at universities and colleges, by geographic division and source: fiscal year 1994

[Dollars in millions]

Page 1 of 1

Division	Total	Federal	Non-Federal
Total	21,081	12,661	8,420
New England	1,813	1,219	594
Middle Atlantic	3,227	2,056	1,172
East North Central	3,036	1,708	1,328
West North Central	1,408	692	716
South Atlantic	3,986	2,458	1,528
East South Central	866	504	363
West South Central	2,041	947	1,094
Mountain	1,344	794	550
Pacific	3,305	2,252	1,053
Outlying Areas	54	31	23

NOTE: Because of rounding, figures may not add to the totals shown.

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-22. R&D expenditures at doctorate-granting institutions, by geographic division, State, and source of funds: fiscal year 1994

[Dollars in thousands]

Page 1 of 1

Division and State	Total	Federal Government	State and local governments	Industry	Institutional funds	All other sources
Total	20,624,144	12,385,664	1,525,205	1,406,627	3,743,808	1,562,840
New England	1,779,296	1,197,093	35,528	131,429	228,889	186,357
Connecticut	372,384	222,569	12,297	19,382	83,651	34,485
Maine	29,393	11,386	2,290	4,406	10,907	404
Massachusetts	1,122,344	792,731	12,325	95,623	86,011	135,654
New Hampshire	101,552	66,794	2,890	4,309	16,859	10,700
Rhode Island	101,848	69,918	3,154	2,831	23,965	1,980
Vermont	51,775	33,695	2,572	4,878	7,496	3,134
Middle Atlantic	3,151,099	2,008,840	114,611	237,386	507,583	282,679
New Jersey	406,019	190,721	39,167	30,042	116,838	29,251
New York	1,660,046	1,096,631	47,254	91,176	232,661	192,324
Pennsylvania	1,085,034	721,488	28,190	116,168	158,084	61,104
East North Central	2,958,401	1,659,544	223,264	191,127	620,495	263,971
Illinois	803,274	452,241	43,863	42,948	194,565	69,657
Indiana	335,227	181,226	19,823	31,873	83,841	18,464
Michigan	730,019	400,670	41,345	47,420	179,925	60,659
Ohio	623,057	357,928	49,954	49,589	103,365	62,221
Wisconsin	466,824	267,479	68,279	19,297	58,799	52,970
West North Central	1,399,916	688,204	197,695	98,494	331,589	83,934
Iowa	314,784	156,867	47,189	18,411	77,371	14,946
Kansas	168,880	64,115	35,147	7,861	53,884	7,873
Minnesota	317,865	181,039	45,786	23,726	46,531	20,783
Missouri	374,610	201,985	19,270	35,140	87,905	30,310
Nebraska	146,388	46,690	41,192	10,786	40,058	7,662
North Dakota	55,709	27,537	1,493	1,989	23,224	1,466
South Dakota	21,680	9,971	7,618	581	2,616	894
South Atlantic	3,837,808	2,374,775	324,782	289,750	662,735	185,766
Delaware	50,734	26,250	2,180	4,117	13,946	4,241
District of Columbia	151,694	103,677	1,340	12,710	19,322	14,645
Florida	548,686	285,156	36,301	42,510	150,442	34,277
Georgia	606,369	287,139	44,663	53,469	200,890	20,208
Maryland	1,129,836	882,802	85,177	44,799	77,559	39,499
North Carolina	658,384	410,886	90,891	65,899	63,465	27,243
South Carolina	196,822	90,558	15,304	18,990	54,049	17,921
Virginia	435,997	253,145	46,990	43,198	68,421	24,243
West Virginia	59,286	35,162	1,936	4,058	14,641	3,489
East South Central	842,236	484,485	90,237	70,331	142,461	54,722
Alabama	295,930	167,923	29,689	30,055	48,170	20,093
Kentucky	126,026	58,080	6,197	15,970	40,965	4,814
Mississippi	114,311	61,265	20,528	8,885	12,414	11,219
Tennessee	305,969	197,217	33,823	15,421	40,912	18,596
West South Central	1,990,495	916,986	267,951	134,354	461,734	209,470
Arkansas	80,577	29,450	22,892	7,763	17,228	3,244
Louisiana	269,460	102,697	65,431	19,715	63,534	18,083
Oklahoma	174,585	59,053	19,275	10,958	68,401	16,898
Texas	1,465,873	725,786	160,353	95,918	312,571	171,245
Mountain	1,321,986	776,846	72,519	96,006	297,068	79,547
Arizona	342,792	182,009	7,257	21,746	113,476	18,304
Colorado	361,327	239,109	8,745	30,340	47,801	35,332
Idaho	55,390	18,075	9,463	10,041	17,219	592
Montana	53,057	24,413	9,268	3,965	14,902	509
Nevada	82,666	43,614	4,570	7,054	26,148	1,280
New Mexico	191,546	118,994	14,573	13,611	30,561	13,807
Utah	201,388	135,517	14,823	8,064	34,936	8,048
Wyoming	33,820	15,115	3,820	1,185	12,025	1,675
Pacific	3,291,500	2,249,351	189,889	156,509	480,736	215,015
Alaska	76,093	40,770	4,625	4,441	26,253	4
California	2,464,430	1,696,906	119,602	105,734	364,751	177,437
Hawaii	70,079	39,392	25,204	434	3,290	1,759
Oregon	242,822	145,737	29,042	9,672	37,826	20,545
Washington	438,076	326,546	11,416	36,228	48,616	15,270
Outlying Areas	51,407	29,540	8,729	1,241	10,518	1,379

NOTE: Because of rounding, figures may not add to the totals shown.

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-23. R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1987-94

[Dollars in thousands]

Page 1 of 1

Division and State	1994	1993	1992	1991	1990	1989	1988	1987
Total	20,624,144	19,549,489	18,497,537	17,312,576	16,041,393	14,756,345	13,284,544	11,991,669
New England	1,779,296	1,736,026	1,614,488	1,511,055	1,422,595	1,356,621	1,234,706	1,115,314
Connecticut	372,384	364,708	339,674	320,935	302,659	284,410	254,958	230,790
Maine	29,393	24,879	23,213	27,082	23,605	19,974	17,341	16,952
Massachusetts	1,122,344	1,093,931	1,018,140	949,074	898,804	867,521	790,391	719,581
New Hampshire	101,552	99,475	87,412	78,975	69,731	62,172	57,658	50,928
Rhode Island	101,848	103,194	96,507	88,448	82,634	79,801	77,543	65,516
Vermont	51,775	49,839	49,542	46,541	45,162	42,743	36,815	31,547
Middle Atlantic	3,151,099	2,937,524	2,827,453	2,650,901	2,526,310	2,356,877	2,146,829	1,938,003
New Jersey	406,019	373,816	379,104	352,310	328,236	283,897	245,077	216,302
New York	1,660,046	1,544,702	1,480,392	1,419,765	1,368,400	1,311,643	1,226,382	1,109,627
Pennsylvania	1,085,034	1,019,006	967,957	878,826	829,674	761,337	675,370	612,074
East North Central	2,958,401	2,798,010	2,633,254	2,452,608	2,235,583	2,081,176	1,897,912	1,709,642
Illinois	803,274	757,508	726,917	697,565	646,927	602,558	546,300	498,221
Indiana	335,227	302,811	282,982	262,508	240,696	227,266	211,813	188,086
Michigan	730,019	699,957	650,400	601,189	527,407	487,192	438,420	396,580
Ohio	623,057	593,542	553,847	503,725	457,189	427,345	381,895	329,344
Wisconsin	466,824	444,192	419,108	387,621	363,364	336,815	319,484	297,411
West North Central	1,399,916	1,341,555	1,248,019	1,209,462	1,072,851	964,779	869,292	801,223
Iowa	314,784	298,745	268,721	259,437	232,472	209,394	181,481	157,539
Kansas	168,880	154,103	139,012	124,174	114,651	107,856	99,655	93,931
Minnesota	317,865	332,033	317,026	331,471	292,046	258,614	236,115	222,381
Missouri	374,610	344,566	321,255	305,780	285,003	255,009	232,148	205,597
Nebraska	146,388	135,737	131,038	123,711	104,371	93,506	83,122	74,468
North Dakota	55,709	54,175	52,731	48,930	29,966	27,951	24,444	35,912
South Dakota	21,680	22,196	18,236	15,959	14,342	12,449	12,327	11,395
South Atlantic	3,837,808	3,604,632	3,356,905	3,181,483	2,945,509	2,715,924	2,316,023	2,083,152
Delaware	50,734	52,627	48,970	44,696	40,119	37,194	32,023	31,681
District of Columbia	151,694	145,218	133,524	118,398	112,146	111,325	94,851	85,470
Florida	548,686	488,551	428,372	438,054	433,413	385,556	298,933	278,847
Georgia	606,369	546,960	514,809	484,019	452,907	424,424	372,720	331,000
Maryland	1,129,836	1,128,066	1,094,029	1,050,023	947,794	900,007	783,036	711,886
North Carolina	658,384	604,581	551,349	501,841	441,860	419,848	366,995	313,819
South Carolina	196,822	178,174	163,839	151,204	137,269	120,137	102,160	95,811
Virginia	435,997	405,434	368,756	342,476	331,973	278,065	234,887	207,934
West Virginia	59,286	55,021	53,257	50,772	48,028	39,368	30,418	26,704
East South Central	842,236	787,043	728,947	695,133	651,712	586,227	536,200	453,231
Alabama	295,930	281,209	258,537	252,998	246,566	215,836	186,949	157,459
Kentucky	126,026	122,409	109,644	97,989	90,880	83,998	91,948	78,008
Mississippi	114,311	105,739	98,555	100,383	88,991	78,922	67,050	59,882
Tennessee	305,969	277,686	262,211	243,763	225,275	207,471	190,253	157,882
West South Central	1,990,495	1,889,238	1,751,210	1,658,979	1,510,855	1,351,292	1,209,496	1,093,296
Arkansas	80,577	74,011	60,657	55,081	48,861	43,676	37,955	35,529
Louisiana	269,460	255,171	243,614	235,726	207,509	180,032	165,623	148,563
Oklahoma	174,585	172,968	169,427	152,624	130,650	113,279	113,931	99,363
Texas	1,465,873	1,387,088	1,277,512	1,215,548	1,123,835	1,014,305	891,987	809,841
Mountain	1,321,986	1,233,199	1,192,476	1,085,661	998,476	885,912	803,902	725,759
Arizona	342,792	310,721	299,733	284,128	261,384	223,834	199,178	181,263
Colorado	361,327	331,081	304,943	260,587	249,958	226,555	206,287	185,699
Idaho	55,390	48,774	46,896	41,437	36,570	33,191	30,789	24,779
Montana	53,057	48,080	44,596	38,149	34,980	32,450	32,069	29,425
Nevada	82,666	79,124	71,425	66,742	53,750	45,555	40,034	34,254
New Mexico	191,546	186,750	181,971	170,139	151,927	136,189	129,087	132,145
Utah	201,388	196,113	212,731	201,470	187,076	164,828	146,029	120,878
Wyoming	33,820	32,556	30,181	23,009	22,831	23,310	20,429	17,316
Pacific	3,291,500	3,174,414	3,093,633	2,820,884	2,633,431	2,415,596	2,231,189	2,034,734
Alaska	76,093	66,796	67,881	67,432	65,571	56,701	49,856	47,432
California	2,464,430	2,380,144	2,342,985	2,146,235	2,007,550	1,850,062	1,726,582	1,558,609
Hawaii	70,079	73,961	80,258	78,166	76,525	70,733	64,278	57,345
Oregon	242,822	225,750	203,915	179,384	171,616	161,215	148,419	135,421
Washington	438,076	427,763	398,594	349,667	312,169	276,885	242,054	235,927
Outlying Areas	51,407	47,848	51 152	46,410	44,071	41,941	38,995	37,315

NOTE: Because of rounding, figures may not add to the totals shown.

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-24. Federally financed R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1987-94

[Dollars in thousands]

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Division and State	1994	1993	1992	1991	1990	1989	1988	1987
Total	12,385,664	11,720,188	10,903,894	10,071,964	9,489,250	8,856,444	8,087,609	7,249,458
New England	1,197,093	1,172,157	1,095,668	1,030,659	981,113	944,086	884,476	808,738
Connecticut	222,569	220,562	205,900	197,120	190,388	187,212	173,912	155,717
Maine	11,386	8,959	8,975	10,062	9,046	8,288	7,048	7,787
Massachusetts	792,731	771,864	724,271	680,168	649,104	621,789	580,783	536,999
New Hampshire	66,794	67,727	60,382	52,833	44,590	41,816	39,077	34,633
Rhode Island	69,918	71,515	63,383	59,616	57,430	56,446	58,117	51,313
Vermont	33,695	31,530	32,757	30,860	30,555	28,535	25,539	22,289
Middle Atlantic	2,008,840	1,895,969	1,765,007	1,620,346	1,554,047	1,442,367	1,355,915	1,241,252
New Jersey	190,721	166,835	165,377	150,044	136,159	119,237	107,538	96,894
New York	1,096,631	1,052,171	984,040	918,063	902,794	854,137	820,962	758,446
Pennsylvania	721,488	676,963	615,590	552,239	515,094	468,993	427,415	385,912
East North Central	1,659,544	1,573,127	1,445,419	1,317,195	1,233,380	1,178,005	1,095,494	976,921
Illinois	452,241	424,745	394,505	361,461	352,786	338,082	315,809	293,929
Indiana	181,226	167,743	153,981	143,761	134,953	136,040	130,777	111,413
Michigan	400,670	377,278	339,328	309,592	276,078	263,506	242,766	207,729
Ohio	357,928	348,166	319,868	284,791	260,537	242,559	217,622	193,615
Wisconsin	267,479	255,195	237,737	217,590	209,026	197,818	188,520	170,235
West North Central	688,204	642,662	604,697	566,841	514,812	482,532	431,767	390,239
Iowa	156,867	145,006	133,612	123,858	113,268	103,360	87,855	76,915
Kansas	64,115	59,635	53,150	43,913	43,478	44,292	42,402	37,386
Minnesota	181,039	174,716	165,926	164,887	143,810	132,880	119,789	109,003
Missouri	201,985	190,959	180,743	165,099	152,398	139,677	124,552	113,146
Nebraska	46,690	38,023	38,600	40,597	34,169	36,761	35,041	33,275
North Dakota	27,537	25,223	24,572	21,570	20,815	19,396	16,285	15,385
South Dakota	9,971	9,100	8,094	6,917	6,874	6,166	5,843	5,129
South Atlantic	2,374,775	2,220,327	2,047,966	1,915,753	1,790,760	1,685,213	1,445,832	1,290,215
Delaware	26,250	26,170	21,629	20,053	17,588	17,083	13,708	13,662
District of Columbia	103,677	100,345	94,107	86,793	86,292	84,274	70,850	62,968
Florida	285,156	267,717	230,439	220,683	223,232	200,742	151,012	129,474
Georgia	287,139	273,079	256,701	238,664	218,498	210,248	180,475	151,367
Maryland	882,802	842,053	825,619	787,317	727,296	705,292	615,451	574,069
North Carolina	410,886	377,983	332,927	303,921	276,795	261,896	229,191	195,177
South Carolina	90,558	73,020	59,688	54,045	45,718	41,627	39,759	34,350
Virginia	253,145	228,298	198,493	183,798	172,435	146,712	129,450	116,137
West Virginia	35,162	31,662	28,363	20,479	22,906	17,339	15,936	13,011
East South Central	484,485	451,921	411,744	373,576	352,424	316,030	280,575	231,795
Alabama	167,923	161,331	142,520	132,063	130,208	119,693	109,380	89,738
Kentucky	58,080	55,698	47,095	38,386	38,249	32,963	33,162	30,778
Mississippi	61,265	54,715	54,512	52,853	43,724	35,747	28,158	24,532
Tennessee	197,217	180,177	167,617	150,274	140,243	127,627	109,875	86,747
West South Central	916,986	860,513	768,317	712,402	659,861	604,636	561,514	495,789
Arkansas	29,450	25,362	22,063	20,178	17,485	14,213	14,039	12,257
Louisiana	102,697	95,891	89,089	98,860	83,213	69,219	60,963	54,367
Oklahoma	59,053	56,475	46,486	42,806	37,020	33,067	31,391	25,880
Texas	725,786	682,785	610,679	550,558	522,143	488,137	455,121	403,285
Mountain	776,846	717,796	689,245	631,853	587,650	522,768	477,080	421,787
Arizona	182,009	149,803	143,240	131,627	122,259	105,367	94,630	80,955
Colorado	239,109	222,107	208,315	187,819	179,978	167,043	152,091	136,003
Idaho	18,075	17,026	17,343	15,681	14,361	12,585	11,196	8,988
Montana	24,413	21,399	18,467	13,801	12,520	11,552	13,635	11,299
Nevada	43,614	43,196	35,599	38,221	33,959	26,587	22,751	18,563
New Mexico	118,994	113,060	110,587	94,309	85,747	76,777	73,835	75,923
Utah	135,517	136,630	142,396	137,613	126,619	109,053	97,806	81,355
Wyoming	15,115	14,575	13,298	12,782	12,207	13,804	11,136	8,701
Pacific	2,249,351	2,159,976	2,046,728	1,877,964	1,790,790	1,656,689	1,532,614	1,373,692
Alaska	40,770	41,616	32,066	34,335	31,896	26,659	23,441	21,523
California	1,696,906	1,629,545	1,546,727	1,436,542	1,378,526	1,285,165	1,198,865	1,069,307
Hawaii	39,392	41,362	47,684	44,857	42,665	40,574	38,560	34,472
Oregon	145,737	134,956	124,198	108,849	107,466	99,141	90,126	81,932
Washington	326,546	312,497	296,053	253,381	230,237	205,150	181,622	166,458
Outlying Areas	29,540	25,740	29,103	25,375	24,413	24,118	22,342	19,030

NOTE: Because of rounding, figures may not add to the totals shown.

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-25. State and local government-financed R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1987-94

[Dollars in thousands]

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Division and State	1994	1993	1992	1991	1990	1989	1988	1987
Total	1,525,205	1,520,381	1,458,526	1,446,577	1,296,482	1,199,790	1,087,742	1,004,522
New England	35,528	38,564	34,857	33,795	31,743	32,965	32,948	27,186
Connecticut	12,297	10,067	5,937	5,996	5,262	5,430	4,013	2,495
Maine	2,290	1,711	1,320	2,197	908	584	543	315
Massachusetts	12,325	15,462	14,461	13,090	14,080	18,529	20,672	18,390
New Hampshire	2,890	5,846	5,175	4,375	3,985	2,646	2,536	2,045
Rhode Island	3,154	2,812	5,434	5,278	5,119	3,276	2,886	2,136
Vermont	2,572	2,666	2,530	2,859	2,389	2,500	2,298	1,805
Middle Atlantic	114,611	132,109	135,242	145,383	152,006	146,090	123,891	114,575
New Jersey	39,167	36,361	41,882	43,361	46,278	45,150	36,815	37,489
New York	47,254	75,571	71,020	75,490	74,439	68,474	61,273	53,496
Pennsylvania	28,190	20,177	22,340	26,532	31,289	32,466	25,803	23,590
East North Central	223,264	220,257	229,174	232,924	199,653	192,219	181,083	161,540
Illinois	43,863	45,716	52,643	52,573	38,023	33,881	29,329	30,610
Indiana	19,823	20,552	20,271	20,347	19,449	18,911	16,813	15,772
Michigan	41,345	39,541	39,907	42,539	36,747	35,983	33,471	30,320
Ohio	49,954	46,038	50,236	53,079	46,349	48,072	47,437	35,038
Wisconsin	68,279	68,410	66,117	64,386	59,085	55,372	54,033	49,800
West North Central	197,695	194,472	174,054	179,472	155,629	134,798	117,197	120,367
Iowa	47,189	38,218	31,006	34,147	29,500	24,839	20,495	16,653
Kansas	35,147	36,640	30,467	28,967	25,523	24,159	21,092	20,031
Minnesota	45,786	49,861	49,720	53,614	47,437	42,542	39,297	37,287
Missouri	19,270	18,959	17,703	19,061	18,469	14,509	13,050	11,753
Nebraska	41,192	39,576	37,523	35,817	27,860	22,926	17,468	16,123
North Dakota	1,493	1,532	1,085	1,327	1,061	918	713	13,731
South Dakota	7,618	9,686	6,550	6,539	5,779	4,905	5,082	4,789
South Atlantic	324,782	304,161	293,253	305,378	286,602	259,531	233,671	210,324
Delaware	2,180	3,710	4,702	4,024	3,139	2,603	2,456	1,995
District of Columbia	1,340	1,038	1,428	463	465	480	264	484
Florida	36,301	31,641	31,775	36,736	33,305	25,655	19,498	13,889
Georgia	44,663	39,325	39,835	43,222	42,638	40,141	40,161	39,621
Maryland	85,177	90,237	78,353	79,047	68,869	61,216	54,382	48,106
North Carolina	90,891	74,041	69,901	71,990	64,923	61,259	58,048	54,897
South Carolina	15,304	16,057	15,480	16,858	17,384	17,421	15,594	14,061
Virginia	46,990	46,108	49,472	51,474	54,680	49,501	42,198	36,400
West Virginia	1,936	2,004	2,307	1,564	1,199	1,255	1,070	871
East South Central	90,237	86,280	80,426	87,202	83,683	77,310	82,729	72,278
Alabama	29,689	26,991	26,313	27,267	25,752	18,339	21,263	16,627
Kentucky	6,197	6,198	5,086	6,122	6,684	7,113	13,169	10,841
Mississippi	20,528	21,836	19,731	20,886	20,953	20,493	19,396	16,775
Tennessee	33,823	31,255	29,296	32,927	30,294	31,365	28,901	28,035
West South Central	267,951	268,325	245,199	228,737	193,867	181,811	152,372	136,685
Arkansas	22,892	23,666	15,441	13,958	11,826	12,186	9,701	9,352
Louisiana	65,431	64,306	64,885	62,167	43,700	40,758	38,556	31,850
Oklahoma	19,275	22,399	19,578	13,593	7,665	5,062	4,670	3,463
Texas	160,353	157,954	145,295	139,019	130,676	123,805	99,445	92,020
Mountain	72,519	81,483	76,216	75,017	72,077	70,675	65,804	67,797
Arizona	7,257	6,333	7,299	7,945	7,318	7,949	5,486	8,965
Colorado	8,745	18,026	15,471	12,905	11,637	10,679	9,334	8,771
Idaho	9,463	12,550	10,681	8,604	8,156	8,112	10,507	8,314
Montana	9,268	9,029	10,285	8,884	7,885	7,919	6,649	7,325
Nevada	4,570	4,361	3,109	2,608	3,200	2,682	3,463	1,973
New Mexico	14,573	13,998	13,845	15,467	14,776	14,612	13,912	17,908
Utah	14,823	13,075	12,874	16,756	17,049	17,183	15,290	13,412
Wyoming	3,820	4,111	2,652	1,848	2,056	1,539	1,163	1,129
Pacific	189,889	186,020	181,965	150,501	113,842	97,329	89,558	83,212
Alaska	4,625	3,012	3,680	1,926	2,205	2,101	1,847	2,999
California	119,602	112,454	111,255	84,176	52,108	43,546	41,516	36,690
Hawaii	25,204	27,099	26,775	27,321	27,487	24,759	21,469	19,317
Oregon	29,042	29,762	27,244	25,727	22,568	20,860	19,399	18,645
Washington	11,416	13,693	13,011	11,351	9,474	6,063	5,327	5,561
Outlying Areas	8,729	8,710	8,140	8,168	7,380	7,062	8,489	10,558

NOTE: Because of rounding, figures may not add to the totals shown.

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-26. Industry-financed R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1987-94

[Dollars in thousands]

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Division and State	1994	1993	1992	1991	1990	1989	1988	1987
Total	1,406,627	1,330,717	1,254,918	1,185,327	1,110,419	978,595	858,483	777,047
New England	131,429	133,365	121,163	123,117	115,753	107,101	96,433	86,493
Connecticut	19,382	18,351	15,273	16,121	13,402	11,630	9,974	9,298
Maine	4,406	4,117	3,545	4,719	4,663	4,002	2,823	2,051
Massachusetts	95,623	98,270	90,422	90,390	86,122	78,727	69,455	64,806
New Hampshire	4,309	4,842	4,451	3,997	3,715	2,951	2,397	2,081
Rhode Island	2,831	3,212	3,135	3,709	4,378	6,305	8,645	5,380
Vermont	4,878	4,573	4,337	4,181	3,473	3,486	3,139	2,877
Middle Atlantic	237,386	225,488	221,727	204,994	194,769	178,759	155,963	140,831
New Jersey	30,042	26,115	25,977	19,502	17,326	16,428	14,233	11,786
New York	91,176	87,804	91,741	85,282	78,359	70,598	63,485	62,756
Pennsylvania	116,168	111,569	104,009	100,210	99,084	91,733	78,245	66,289
East North Central	191,127	181,149	169,055	169,656	162,037	147,578	112,578	99,851
Illinois	42,948	44,745	43,574	49,583	44,812	38,990	29,173	23,791
Indiana	31,873	22,535	21,165	19,726	18,165	18,419	16,244	17,203
Michigan	47,420	47,390	44,903	43,684	44,694	36,310	26,063	25,146
Ohio	49,589	47,781	40,665	37,948	37,385	37,591	26,940	22,265
Wisconsin	19,297	18,698	18,748	18,715	16,981	16,268	14,158	11,446
West North Central	98,494	90,000	85,539	81,592	78,235	69,373	61,163	52,740
Iowa	18,411	17,907	21,563	14,372	12,354	14,711	9,488	6,212
Kansas	7,861	7,527	8,302	7,292	7,613	5,187	5,648	5,433
Minnesota	23,726	21,524	17,529	19,270	18,086	12,389	10,670	11,056
Missouri	35,140	31,492	27,152	30,195	28,082	25,151	23,494	19,325
Nebraska	10,786	8,891	8,529	7,845	8,875	9,098	8,585	6,664
North Dakota	1,989	2,173	2,056	2,308	2,845	2,521	2,742	3,578
South Dakota	581	486	408	310	380	316	536	472
South Atlantic	289,750	279,294	256,940	241,594	213,451	179,045	157,246	134,951
Delaware	4,117	4,857	5,075	4,732	4,397	4,073	3,558	3,659
District of Columbia	12,710	10,313	8,113	7,279	8,017	7,924	6,504	4,192
Florida	42,510	40,565	35,077	35,690	28,440	20,660	18,019	20,334
Georgia	53,469	51,968	42,067	40,010	37,343	35,635	34,521	34,196
Maryland	44,799	47,604	44,140	39,832	42,577	35,556	28,874	25,782
North Carolina	65,899	69,950	63,625	55,079	43,372	41,375	36,628	23,825
South Carolina	18,990	14,242	19,061	15,903	12,931	7,906	8,693	6,184
Virginia	43,198	35,822	34,187	31,899	26,292	21,953	19,672	15,895
West Virginia	4,058	3,973	5,595	11,170	10,082	3,963	777	884
East South Central	70,331	62,871	57,070	52,168	45,847	39,564	38,224	33,670
Alabama	30,055	23,729	21,620	20,348	18,662	16,242	12,703	10,916
Kentucky	15,970	13,575	12,800	10,569	8,123	7,516	4,591	6,715
Mississippi	8,885	9,824	9,141	8,892	8,314	5,439	5,050	4,282
Tennessee	15,421	15,743	13,509	12,359	10,748	10,367	15,880	11,757
West South Central	134,354	123,149	117,231	108,715	96,387	81,558	75,186	63,964
Arkansas	7,763	6,767	5,381	4,514	4,064	4,123	3,865	2,829
Louisiana	19,715	16,508	17,757	15,678	10,168	8,193	8,088	7,154
Oklahoma	10,958	10,320	10,170	8,559	6,872	5,667	7,855	7,078
Texas	95,918	89,554	83,923	79,964	75,283	63,575	55,378	46,903
Mountain	96,006	88,619	91,969	79,189	78,150	62,089	59,438	63,336
Arizona	21,746	18,889	19,130	19,519	18,066	12,500	15,196	17,456
Colorado	30,340	23,651	21,637	16,481	15,992	14,381	11,044	8,728
Idaho	10,041	7,286	5,147	5,050	4,206	4,199	3,654	2,899
Montana	3,965	3,234	3,230	4,406	4,266	3,242	3,129	3,197
Nevada	7,054	5,245	5,992	5,323	4,733	4,296	3,563	3,983
New Mexico	13,611	18,743	22,460	19,530	21,509	16,433	15,837	20,123
Utah	8,064	9,303	11,532	6,880	7,377	5,503	5,215	5,734
Wyoming	1,185	2,268	2,841	2,000	2,001	1,535	1,800	1,216
Pacific	156,509	146,277	133,208	123,625	125,474	113,306	102,065	101,211
Alaska	4,441	4,751	3,275	1,547	4,100	3,039	2,672	3,024
California	105,734	99,291	93,959	86,265	88,708	83,218	74,459	72,676
Hawaii	434	151	337	856	1,585	799	378	261
Oregon	9,672	8,578	6,736	6,850	6,343	4,857	4,641	4,067
Washington	36,228	33,506	28,901	28,107	24,738	21,393	19,915	21,183
Outlying Areas	1,241	505	1,016	677	316	222	187	0

NOTE: Because of rounding, figures may not add to the totals shown.

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-27. Institutionally financed R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1987-94

[Dollars in thousands]

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Division and State	1994	1993	1992	1991	1990	1989	1988	1987
Total	3,743,808	3,515,411	3,491,234	3,319,727	2,968,557	2,664,923	2,327,268	2,143,313
New England	228,889	214,022	206,187	183,813	162,105	148,711	111,972	100,028
Connecticut	83,651	80,829	79,429	73,778	68,927	56,999	43,689	39,761
Maine	10,907	9,674	8,892	9,504	8,253	6,567	6,214	5,740
Massachusetts	86,011	80,017	76,655	66,391	53,644	58,681	40,865	37,790
New Hampshire	16,859	11,768	11,421	10,225	11,500	9,333	9,556	8,114
Rhode Island	23,965	23,481	22,345	17,520	13,237	11,646	7,294	5,293
Vermont	7,496	8,253	7,445	6,395	6,544	5,485	4,354	3,330
Middle Atlantic	507,583	445,820	461,405	446,646	407,055	363,266	309,617	267,517
New Jersey	116,838	116,307	119,163	114,157	103,882	82,798	68,835	55,142
New York	232,661	180,217	183,967	190,624	177,199	170,970	149,334	126,941
Pennsylvania	158,084	149,296	158,275	141,865	125,974	109,498	91,448	85,434
East North Central	620,495	559,002	537,691	517,977	451,668	415,859	374,596	348,489
Illinois	194,565	178,026	171,466	177,424	161,984	150,694	134,015	117,826
Indiana	83,841	65,991	64,601	61,425	52,059	43,658	39,938	37,627
Michigan	179,925	172,114	163,068	152,841	128,581	116,135	104,181	103,830
Ohio	103,365	89,146	83,800	73,765	61,520	62,068	54,761	47,189
Wisconsin	58,799	53,725	54,756	52,522	47,524	43,304	41,701	42,017
West North Central	331,589	330,605	308,328	301,243	252,727	220,024	201,626	184,248
Iowa	77,371	80,919	71,144	74,471	67,626	60,863	55,980	49,668
Kansas	53,884	44,215	42,537	39,897	33,491	30,204	27,567	27,607
Minnesota	46,531	64,840	61,532	60,904	53,399	43,713	37,261	39,371
Missouri	87,905	78,490	69,361	67,335	63,364	59,615	57,777	49,579
Nebraska	40,058	36,406	38,051	34,780	29,856	20,676	18,697	14,893
North Dakota	23,224	23,595	23,417	22,336	4,019	4,113	3,705	2,391
South Dakota	2,616	2,140	2,286	1,520	972	840	639	739
South Atlantic	662,735	636,028	605,474	576,457	526,583	484,225	398,082	372,513
Delaware	13,946	13,937	14,522	12,724	11,751	11,125	9,894	10,117
District of Columbia	19,322	18,346	15,871	12,718	10,539	13,022	11,614	11,642
Florida	150,442	119,937	108,535	116,339	122,097	112,906	93,228	98,188
Georgia	200,890	167,509	161,049	149,645	143,645	126,231	108,098	95,827
Maryland	77,559	115,976	114,325	113,214	80,589	74,426	66,076	53,295
North Carolina	63,465	63,862	65,197	51,758	40,761	41,222	31,865	25,757
South Carolina	54,049	52,850	51,932	54,011	50,859	44,864	33,793	37,110
Virginia	68,421	69,479	61,868	52,857	54,213	45,348	32,301	29,841
West Virginia	14,641	14,132	12,175	13,191	12,129	15,081	11,213	10,736
East South Central	142,461	135,481	135,311	137,579	126,130	113,590	103,260	89,485
Alabama	48,170	48,358	48,532	52,667	52,253	45,106	34,048	29,919
Kentucky	40,965	42,013	39,870	38,008	33,258	30,593	35,099	26,545
Mississippi	12,414	10,960	9,485	12,132	9,488	9,670	8,737	8,897
Tennessee	40,912	34,150	37,424	34,772	31,131	28,221	25,376	24,124
West South Central	461,734	436,186	418,473	415,244	391,329	326,841	282,434	276,815
Arkansas	17,228	14,774	14,321	12,945	12,451	9,521	7,286	8,028
Louisiana	63,534	61,267	51,397	44,184	55,010	47,129	45,611	42,639
Oklahoma	68,401	67,338	76,907	74,265	70,398	60,063	62,105	57,472
Texas	312,571	292,807	275,848	283,850	253,470	210,128	167,432	168,676
Mountain	297,068	273,062	271,936	242,979	205,554	183,797	158,178	136,712
Arizona	113,476	112,596	110,306	109,028	98,210	86,076	71,898	61,644
Colorado	47,801	41,797	36,675	23,078	22,465	17,735	17,916	17,682
Idaho	17,219	11,068	13,232	11,697	9,596	8,148	5,432	4,436
Montana	14,902	14,011	11,545	10,820	10,147	9,534	8,442	7,604
Nevada	26,148	25,193	25,553	19,675	10,172	10,396	8,995	8,805
New Mexico	30,561	28,507	25,388	28,762	19,399	17,860	16,183	14,187
Utah	34,936	29,253	38,330	33,779	29,237	27,822	23,208	16,178
Wyoming	12,025	10,637	10,907	6,140	6,328	6,226	6,104	6,176
Pacific	480,736	474,888	535,529	487,541	435,398	400,013	379,638	359,879
Alaska	26,253	17,412	27,205	28,246	23,636	21,869	19,229	17,960
California	364,751	367,857	427,406	389,156	351,692	321,615	312,158	289,628
Hawaii	3,290	3,109	3,319	3,391	3,568	3,686	2,975	2,591
Oregon	37,826	34,209	30,184	21,519	19,074	16,717	17,325	16,077
Washington	48,616	52,301	47,415	45,229	37,428	36,126	27,951	33,623
Outlying Areas	10,518	10,317	10,900	10,248	10,008	8,597	7,865	7,627

NOTE: Because of rounding, figures may not add to the totals shown.

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-28. All other sources of financed R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1987-94

[Dollars in thousands]

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Division and State	1994	1993	1992	1991	1990	1989	1988	1987
Total	1,562,840	1,462,792	1,388,965	1,288,981	1,176,685	1,056,593	923,442	817,329
New England	186,357	177,918	156,613	139,671	131,881	123,758	108,877	92,869
Connecticut	34,485	34,899	33,135	27,920	24,680	23,139	23,370	23,519
Maine	404	418	481	600	735	533	713	1,059
Massachusetts	135,654	128,318	112,331	99,035	95,854	89,795	78,616	61,596
New Hampshire	10,700	9,292	5,983	7,545	5,941	5,426	4,092	4,055
Rhode Island	1,980	2,174	2,210	2,325	2,470	2,128	601	1,394
Vermont	3,134	2,817	2,473	2,246	2,201	2,737	1,485	1,246
Middle Atlantic	282,679	238,138	244,072	233,532	218,433	226,395	201,443	173,828
New Jersey	29,251	28,198	26,705	25,246	24,591	20,284	17,656	14,991
New York	192,324	148,939	149,624	150,306	135,609	147,464	131,328	107,988
Pennsylvania	61,104	61,001	67,743	57,980	58,233	58,647	52,459	50,849
East North Central	263,971	264,475	251,915	214,856	188,845	147,515	134,161	122,841
Illinois	69,657	64,276	64,729	56,524	49,322	40,911	37,974	32,065
Indiana	18,464	25,990	22,964	17,249	16,070	10,238	8,041	6,071
Michigan	60,659	63,634	63,194	52,533	41,307	35,258	31,939	29,555
Ohio	62,221	62,411	59,278	54,142	51,398	37,055	35,135	31,237
Wisconsin	52,970	48,164	41,750	34,408	30,748	24,053	21,072	23,913
West North Central	83,934	83,816	75,401	80,314	71,448	58,052	57,539	53,629
Iowa	14,946	16,695	11,396	12,589	9,724	5,621	7,663	8,091
Kansas	7,873	6,086	4,556	4,105	4,546	4,014	2,946	3,474
Minnesota	20,783	21,092	22,319	32,796	29,314	27,090	29,098	25,664
Missouri	30,310	24,666	26,296	24,090	22,690	16,057	13,275	11,794
Nebraska	7,662	12,841	8,335	4,672	3,611	4,045	3,331	3,513
North Dakota	1,466	1,652	1,601	1,389	1,226	1,003	999	827
South Dakota	894	784	898	673	337	222	227	266
South Atlantic	185,766	164,822	153,272	142,301	128,113	107,910	81,192	75,149
Delaware	4,241	3,953	3,042	3,163	3,244	2,310	2,407	2,248
District of Columbia	14,645	15,176	14,005	11,145	6,833	5,625	5,619	6,184
Florida	34,277	28,691	22,546	28,606	26,339	25,593	17,176	16,962
Georgia	20,208	15,079	15,157	12,478	10,783	12,169	9,465	9,989
Maryland	39,499	32,196	31,592	30,613	28,463	23,517	18,253	10,634
North Carolina	27,243	18,745	19,699	19,093	16,009	14,096	11,263	14,163
South Carolina	17,921	22,005	17,678	10,387	10,377	8,319	4,321	4,106
Virginia	24,243	25,727	24,736	22,448	24,353	14,551	11,266	9,661
West Virginia	3,489	3,250	4,817	4,368	1,712	1,730	1,422	1,202
East South Central	54,722	50,490	44,396	44,608	43,628	39,733	31,412	26,003
Alabama	20,093	20,800	19,552	20,653	19,691	16,456	9,555	10,259
Kentucky	4,814	4,925	4,793	4,904	4,566	5,813	5,927	3,129
Mississippi	11,219	8,404	5,686	5,620	6,512	7,573	5,709	5,396
Tennessee	18,596	16,361	14,365	13,431	12,859	9,891	10,221	7,219
West South Central	209,470	201,065	201,990	193,881	169,411	156,446	137,990	120,043
Arkansas	3,244	3,442	3,451	3,486	3,035	3,633	3,064	3,063
Louisiana	18,083	17,199	20,486	14,837	15,418	14,733	12,405	12,553
Oklahoma	16,898	16,436	16,286	13,401	8,695	9,420	7,910	5,470
Texas	171,245	163,988	161,767	162,157	142,263	128,660	114,611	98,957
Mountain	79,547	72,239	63,110	56,623	55,045	46,583	43,402	36,127
Arizona	18,304	23,100	19,758	16,009	15,531	11,942	11,968	12,243
Colorado	35,332	25,500	22,845	20,304	19,886	16,717	15,902	14,515
Idaho	592	844	493	405	251	147	0	142
Montana	509	407	1,069	238	162	203	214	0
Nevada	1,280	1,129	1,172	915	1,686	1,594	1,262	930
New Mexico	13,807	12,442	9,691	12,071	10,496	10,507	9,320	4,004
Utah	8,048	7,852	7,599	6,442	6,794	5,267	4,510	4,199
Wyoming	1,675	965	483	239	239	206	226	94
Pacific	215,015	207,253	196,203	181,253	167,927	148,259	127,314	116,740
Alaska	4	5	1,655	1,378	3,734	3,033	2,667	1,926
California	177,437	170,997	163,638	150,096	136,516	116,518	99,584	90,308
Hawaii	1,759	2,240	2,143	1,741	1,220	915	896	704
Oregon	20,545	18,245	15,553	16,439	16,165	19,640	16,928	14,700
Washington	15,270	15,766	13,214	11,599	10,292	8,153	7,239	9,102
Outlying Areas	1,379	2,576	1,993	1,942	1,954	1,942	112	100

NOTE: Because of rounding, figures may not add to the totals shown.

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-29. R&D expenditures at doctorate-granting institutions, by State, control, and source of funds: fiscal year 1994

[Dollars in thousands]

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State, control, and institution	Total	Federal Government	State and local governments	Industry	Institutional funds	All other sources
United States, total	20,624,144	12,385,664	1,525,205	1,406,627	3,743,808	1,562,840
Public, total	13,792,118	7,428,445	1,410,152	938,629	3,085,078	929,814
Private, total	6,832,026	4,957,219	115,053	467,998	658,730	633,026
Alabama, total	295,930	167,923	29,689	30,055	48,170	20,093
Public, total	295,930	167,923	29,689	30,055	48,170	20,093
Alabama A&M University	11,098	8,954	0	0	2,144	0
Auburn University	75,738	18,347	24,432	7,940	19,164	5,855
The University of Alabama	21,960	11,482	64	2,332	8,082	0
U of Alabama Birmingham	141,735	98,719	3,283	14,772	10,723	14,238
U of Alabama Huntsville	31,482	21,583	1,262	2,948	5,689	0
U of South Alabama	13,917	8,838	648	2,063	2,368	0
Alaska, total	76,093	40,770	4,625	4,441	26,253	4
Public, total	76,093	40,770	4,625	4,441	26,253	4
U of Alaska Fairbanks	76,093	40,770	4,625	4,441	26,253	4
Arizona, total	342,792	182,009	7,257	21,746	113,476	18,304
Public, total	342,792	182,009	7,257	21,746	113,476	18,304
Arizona State University	62,563	30,699	997	5,780	23,137	1,950
Northern Arizona U	10,290	5,614	889	913	2,874	0
University of Arizona	269,939	145,696	5,371	15,053	87,465	16,354
Arkansas, total	80,577	29,450	22,892	7,763	17,228	3,244
Public, total	80,577	29,450	22,892	7,763	17,228	3,244
U Arkansas Main	57,815	16,040	22,672	5,605	11,531	1,967
U Arkansas Medical Sci	22,762	13,410	220	2,158	5,697	1,277
California, total	2,464,430	1,696,906	119,602	105,734	364,751	177,437
Public, total	1,786,394	1,151,557	108,778	66,878	308,100	151,081
CA St U Long Beach	4,756i	4,072i	88i	492i	40i	64i
San Diego St University	29,309	12,268	7,696	1,272	5,665	2,408
U CA Berkeley	289,632	152,528	38,655	12,547	68,133	17,769
U CA Davis	230,147	112,718	18,053	7,423	75,982	15,971
U CA Irvine	104,778	67,245	4,938	6,243	14,242	12,110
U CA Los Angeles	279,869	190,202	4,351	13,394	37,157	34,765
U CA Office of the Pres	0	0	0	0	0	0
U CA Riverside	60,995	23,743	2,624	1,103	30,035	3,490
U CA San Diego	331,901	266,166	10,616	9,764	22,552	22,803
U CA San Francisco	312,393	213,252	18,340	10,977	35,585	34,239
U CA Santa Barbara	73,619	59,336	1,291	2,711	6,683	3,598
U CA Santa Cruz	42,457	23,802	2,064	893	12,026	3,672
US Naval Postgrad School	26,538	26,225	62	59	0	192
Private, total	678,036	545,349	10,824	38,856	56,651	26,356
Biola University	0	0	0	0	0	0
C R Drew U of Med & Sci	9,347	7,674	0	1,673	0	0
CA Inst of Integral Stu	0	0	0	0	0	0
CA Sch Prof Psy Alameda	0	0	0	0	0	0
CA Sch Prof Psy Fresno	1,279	452	0	0	492	335
CA Sch Prof Psy L A	451	0	0	0	313	138
CA Sch Prof Psy S Diego	25	0	0	0	25	0
California Inst of Tech	127,946	112,502	629	4,947	7,703	2,165
Claremont Graduate Sch	1,229	293	209	39	202	486
Col Osteo Med of Pacific	168	68	0	0	100	0
Fielding Institute	0	0	0	0	0	0
Fuller Theological Sem	35	0	20	5	10	0
Golden Gate University	0	0	0	0	0	0
Loma Linda University	9,204	5,082	0	2,514	1,225	383
Pacific Grad Sch of Psy	0	0	0	0	0	0
Pepperdine University	0	0	0	0	0	0
RAND Grad Sch Pol Stu	0	0	0	0	0	0
Santa Clara University	1,815e	422e	0	452e	887e	54e
Stanford University	318,561	268,559	1,006	14,714	11,586	22,696

See explanatory information and SOURCE at end of table.

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Table B-29. R&D expenditures at doctorate-granting institutions, by State, control, and source of funds: fiscal year 1994

[Dollars in thousands]

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State, control, and institution	Total	Federal Government	State and local governments	Industry	Institutional funds	All other sources
California, continued:						
Private, continued:						
The Wright Institute	0	0	0	0	0	0
U of Southern California	207,275	149,735	8,960	14,502	34,078	0
US International U	0	0	0	0	0	0
University of San Diego	641	502	0	10	30	99
University of the Pacific	60	60	0	0	0	0
Colorado, total	361,327	239,109	8,745	30,340	47,801	35,332
Public, total	354,656	232,965	8,645	30,204	47,630	35,212
Colorado School of Mines	13,880	8,161	511	5,087	121	0
Colorado State University	112,457	66,464	4,511	11,793	23,355	6,334
U of Northern Colorado	252	177	19	12	44	0
University of Colorado	228,067	158,163	3,604	13,312	24,110	28,878
Private, total	6,671	6,144	100	136	171	120
University of Denver	6,671	6,144	100	136	171	120
Connecticut, total	372,384	222,569	12,297	19,382	83,651	34,485
Public, total	136,740	48,286	9,544	7,651	63,448	7,811
University of Connecticut	136,740	48,286	9,544	7,651	63,448	7,811
Private, total	235,644	174,283	2,753	11,731	20,203	26,674
University of Hartford	157	148	0	9	0	0
Wesleyan University	5,112	2,710	444	9	897	1,052
Yale University	230,375	171,425	2,309	11,713	19,306	25,622
Delaware, total	50,734	26,250	2,180	4,117	13,946	4,241
Public, total	50,734	26,250	2,180	4,117	13,946	4,241
University of Delaware	50,734	26,250	2,180	4,117	13,946	4,241
District of Columbia, total	151,694	103,677	1,340	12,710	19,322	14,645
Private, total	151,694	103,677	1,340	12,710	19,322	14,645
American University	3,226	3,052	5	36	95	38
Catholic U of America	7,542	6,058	0	1,484	0	0
George Washington U	38,429	24,379	426	2,676	3,142	7,806
Georgetown University	82,661	54,992	1	6,773	14,095	6,800
Howard University	19,836	15,196	908	1,741	1,990	1
Florida, total	548,686	285,156	36,301	42,510	150,442	34,277
Public, total	421,582	191,054	31,835	30,278	144,996	23,419
Florida A&M University	24,691	20,730	2,360	1,601	0	0
Florida Atlantic U	11,236	6,797	2,530	1,909	0	0
Florida International U	13,520	10,936	1,208	413	564	399
Florida State University	76,588	39,775	3,719	1,893	27,766	3,435
U of Central Florida	41,362	13,276	3,315	5,369	19,402	0
U of South Florida	86,186	19,910	7,415	6,338	42,932	9,591
University of Florida	167,999	79,630	11,288	12,755	54,332	9,994
Private, total	127,104	94,102	4,466	12,232	5,446	10,858
Florida Inst of Tech	4,384	1,654	1,627	947	41	115
Nova University	1,245	885	201	145	14	0
University of Miami	121,475	91,563	2,638	11,140	5,391	10,743
Georgia, total	606,369	287,139	44,663	53,469	200,890	20,208
Public, total	426,599	167,972	41,499	40,911	172,658	3,559
Georgia Institute of Tech	193,630	97,075	3,307	27,832	65,416	0
Georgia State University	17,100	6,771	580	731	8,403	615
Medical Col of Georgia	28,020	9,121	329	3,575	13,334	1,661
University of Georgia	187,849	55,005	37,283	8,773	85,505	1,283

See explanatory information and SOURCE at end of table.

Table B-29. R&D expenditures at doctorate-granting institutions, by State, control, and source of funds: fiscal year 1994

[Dollars in thousands]

Page 3 of 10

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institutional funds	All other sources
Georgia, continued:						
Private, total	179,770	119,167	3,164	12,558	28,232	16,649
Clark Atlanta University	12,709	11,025	139	200	1,345	0
Emory University	136,343	88,735	3,025	8,966	19,457	16,160
Inst Paper Sci and Tech	8,995	1,629	0	1,971	4,916	479
Mercer University	14,201	11,115	0	849	2,237	0
Morehouse School of Med	7,522	6,663	0	572	277	10
Hawaii, total	70,079	39,392	25,204	434	3,290	1,759
Public, total	70,079	39,392	25,204	434	3,290	1,759
University Hawaii Manoa	70,079	39,392	25,204	434	3,290	1,759
Idaho, total	55,390	18,075	9,463	10,041	17,219	592
Public, total	55,390	18,075	9,463	10,041	17,219	592
Idaho State University	6,052	1,489	638	2,546	984	395
University of Idaho	49,338	16,586	8,825	7,495	16,235	197
Illinois, total	803,274	452,241	43,863	42,948	194,565	69,657
Public, total	406,161	214,324	39,007	21,923	103,601	27,306
Illinois State University	5,071	2,347	1,761	0	26	937
Northern Illinois U	11,445	6,238	156	988	4,063	0
Sthrn IL U Carbondale	30,497	9,931	5,325	2,347	11,168	1,726
University of IL Chicago	113,741	57,074	3,275	5,061	33,174	15,157
University of IL Urbana	245,407	138,734	28,490	13,527	55,170	9,486
Private, total	397,113	237,917	4,856	21,025	90,964	42,351
Chicago Sch of Prof Psy	0	0	0	0	0	0
De Paul University	1,329	868	44	12	168	237
Finch U Hlth Sci Chicago	7,057	5,214	0	82	832	929
Illinois Inst of Tech	8,853	6,738	141	1,254	720	0
Loyola U of Chicago	36,830	23,587	709	3,795	5,011	3,728
Midwestern University	1,928	465	0	362	1,019	82
Northwestern University	179,478	83,684	3,138	9,203	66,060	17,393
Rush University	39,736	14,831	436	4,993	10,656	8,820
University of Chicago	121,902	102,530	388	1,324	6,498	11,162
Indiana, total	335,227	181,226	19,823	31,873	83,841	18,464
Public, total	312,394	164,868	18,871	28,163	82,028	18,464
Ball State University	2,002	696	31	585	690	0
Indiana State University	1,042	367	249	250	0	176
Indiana University	136,617	81,657	1,646	5,689	29,657	17,968
Purdue University	172,733	82,148	16,945	21,639	51,681	320
Private, total	22,833	16,358	952	3,710	1,813	0
University of Notre Dame	22,833	16,358	952	3,710	1,813	0
Iowa, total	314,784	156,867	47,189	18,411	77,371	14,946
Public, total	314,422	156,540	47,189	18,391	77,356	14,946
Iowa State University	155,982	56,439	42,811	8,185	43,601	4,946
U of Iowa	157,036	99,536	4,180	10,205	33,182	9,933
U of Northern Iowa	1,404	565	198	1	573	67
Private, total	362	327	0	20	15	0
Maharishi International U	0	0	0	0	0	0
U Osteo Med & Hlth Sci	362	327	0	20	15	0

See explanatory information and SOURCE at end of table.

Table B-29. R&D expenditures at doctorate-granting institutions, by State, control, and source of funds: fiscal year 1994

[Dollars in thousands]

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State, control, and institution	Total	Federal Government	State and local governments	Industry	Institutional funds	All other sources
Kansas, total	168,880	64,115	35,147	7,861	53,884	7,873
Public, total	168,880	64,115	35,147	7,861	53,884	7,873
Kansas State University	65,696	21,547	27,101	3,111	12,187	1,750
University of Kansas	95,701	40,816	5,914	4,320	39,065	5,586
Wichita State University	7,483	1,752	2,132	430	2,632	537
Kentucky, total	126,026	58,080	6,197	15,970	40,965	4,814
Public, total	126,014	58,075	6,197	15,970	40,958	4,814
University of Kentucky	105,539	48,801	6,135	11,790	33,999	4,814
University of Louisville	20,475	9,274	62	4,180	6,959	0
Private, total	12	5	0	0	7	0
Spalding University	12	5	0	0	7	0
Louisiana, total	269,460	102,697	65,431	19,715	63,534	18,083
Public, total	181,399	56,167	62,944	9,697	39,897	12,694
Louisiana St U, All Camp	165,857	52,064	59,379	9,037	33,728	11,649
Louisiana Tech University	2,315	505	710	654	446	0
Northeast Louisiana U	2,128	1,600	528	0	0	0
U of Southwestern LA	11,099	1,998	2,327	6	5,723	1,045
Private, total	88,061	46,530	2,487	10,018	23,637	5,389
Tulane University	83,885	42,354	2,487	10,018	23,637	5,389
Xavier University of LA	4,176	4,176	0	0	0	0
Maine, total	29,393	11,386	2,290	4,406	10,907	404
Public, total	29,393	11,386	2,290	4,406	10,907	404
U of Maine	29,393	11,386	2,290	4,406	10,907	404
Maryland, total	1,129,836	882,802	85,177	44,799	77,559	39,499
Public, total	345,793	171,110	83,617	34,381	49,532	7,153
U MD Baltimore County	8,117	6,080	1,500	537	0	0
U MD Baltimore Prof Sch	110,866	59,727	22,869	15,411	5,706	7,153
U MD College Park	198,348	86,051	59,248	18,433	34,616	0
U MD Eastern Shore	1,128	1,128	0	0	0	0
Unif Svcs U of Hlth Sci	27,334	18,124	0	0	9,210	0
Private, total	784,043	711,692	1,560	10,418	28,027	32,346
Johns Hopkins U	784,043	711,692	1,560	10,418	28,027	32,346
Massachusetts, total	1,122,344	792,731	12,325	95,623	86,011	135,654
Public, total	153,251	77,316	8,321	12,339	41,043	14,232
U MA Amherst	65,344	32,730	5,060	4,868	16,715	5,971
U MA Boston	10,962	2,382	2,542	0	3,705	2,333
U MA Lowell	15,155	7,281	499	3,695	2,568	1,112
U MA Worcester	61,790	34,923	220	3,776	18,055	4,816
Private, total	969,093	715,415	4,004	83,284	44,968	121,422
Boston College	10,724	7,938	77	406	1,230	1,073
Boston University	90,504	72,551	785	8,695	0	8,473
Brandeis University	34,835	21,585	176	0	3,990	9,084
Clark University	2,711	2,301	0	0	0	410
Harvard University	278,459e	190,183	251	10,228	15,779e	62,018
MA Col Phar Allied Hlth	222	0	0	222	0	0
MA Institute of Tech	363,918	270,718	1,728	55,500	8,724	27,248
Northeastern University	19,104	16,037	291	2,002	163	611
Smith College	1,920	627	0	0	483	810
Tufts University	73,749	49,672	0	5,131	12,675	6,271
Woods Hole Oceanograph	81,345	74,219	501	332	1,073	5,220
Worcester Polytech Inst	11,602	9,584	195	768	851	204

See explanatory information and SOURCE at end of table.

Table B-29. R&D expenditures at doctorate-granting institutions, by State, control, and source of funds: fiscal year 1994

[Dollars in thousands]

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State, control, and institution	Total	Federal Government	State and local governments	Industry	Institutional funds	All other sources
Michigan, total	730,019	400,670	41,345	47,420	179,925	60,659
Public, total	727,245	399,222	41,345	46,272	179,767	60,639
Central Michigan U	1,334	406	215	314	399	0
Michigan State University	163,285	73,855	25,734	6,271	43,923	13,502
Michigan Tech University	21,786	10,984	1,162	2,885	6,755	0
Oakland University	6,285	3,202	522	914	1,569	78
University of Michigan	430,778	264,722	5,682	26,732	97,115	36,527
Wayne State University	94,632	43,354	6,698	7,988	27,684	8,908
Western Michigan U	9,145	2,699	1,332	1,168	2,322	1,624
Private, total	2,774	1,448	0	1,148	158	20
Andrews University	247	109	0	0	118	20
U of Detroit Mercy	2,527	1,339	0	1,148	40	0
Minnesota, total	317,865	181,039	45,786	23,726	46,531	20,783
Public, total	317,865	181,039	45,786	23,726	46,531	20,783
University of Minnesota	317,865	181,039	45,786	23,726	46,531	20,783
Private, total	0	0	0	0	0	0
Mayo Grad Sch of Med	0	0	0	0	0	0
Mississippi, total	114,311	61,265	20,528	8,885	12,414	11,219
Public, total	114,311	61,265	20,528	8,885	12,414	11,219
Jackson State University	4,697	4,220	0	477	0	0
Mississippi State U	76,201	33,918	17,601	5,913	8,869	9,900
U Southern Mississippi	8,413	7,291	331	497	294	0
U Mississippi, All Camp	25,000	15,836	2,596	1,998	3,251	1,319
Missouri, total	374,610	201,985	19,270	35,140	87,905	30,310
Public, total	159,786	45,088	15,324	12,733	74,985	11,656
U of Missouri Columbia	121,256	31,299	14,438	10,299	57,415	7,805
U of Missouri Kansas City	11,420	4,758	458	834	4,416	954
U of Missouri Rolla	19,706	6,472	283	1,122	9,195	2,634
U of Missouri St Louis	6,664	2,559	145	478	3,219	263
U of Missouri Sys Admn	740	0	0	0	740	0
Private, total	214,824	156,897	3,946	22,407	12,920	18,654
Forest Inst of Prof Psy	48	0	36	0	12	0
Kirksville Col Osteo Med	836	478	0	0	141	217
St Louis University	20,844	18,120	243	1,545	534	402
U of Health Sci (MO)	718	0	0	233	185	300
Washington University	192,378	138,299	3,667	20,629	12,048	17,735
Montana, total	53,057	24,413	9,268	3,965	14,902	509
Public, total	53,057	24,413	9,268	3,965	14,902	509
Montana State University	36,149	15,738	8,632	3,139	8,640	0
University of Montana	16,908	8,675	636	826	6,262	509
Nebraska, total	146,388	46,690	41,192	10,786	40,058	7,662
Public, total	136,743	42,037	41,060	7,319	38,734	7,593
U of NE Med Ctr Omaha	33,997	12,256	4,972	3,639	11,078	2,052
U of Nebraska Lincoln	102,746	29,781	36,088	3,680	27,656	5,541
Private, total	9,645	4,653	132	3,467	1,324	69
Creighton University	9,645	4,653	132	3,467	1,324	69

See explanatory information and SOURCE at end of table.

Table B-29. R&D expenditures at doctorate-granting institutions, by State, control, and source of funds: fiscal year 1994

[Dollars in thousands]

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institutional funds	All other sources
Nevada, total	82,666	43,614	4,570	7,054	26,148	1,280
Public, total	82,666	43,614	4,570	7,054	26,148	1,280
Desert Research Institute	21,459	15,272	1,844	3,798	500	45
U of Nevada Las Vegas	19,031	9,543	1,869	1,582	5,552	485
U of Nevada Reno	42,176	18,799	857	1,674	20,096	750
New Hampshire, total	101,552	66,794	2,890	4,309	16,859	10,700
Public, total	43,707	25,032	1,953	1,476	10,044	5,202
U of New Hampshire	43,707	25,032	1,953	1,476	10,044	5,202
Private, total	57,845	41,762	937	2,833	6,815	5,498
Dartmouth College	57,845	41,762	937	2,833	6,815	5,498
New Jersey, total	406,019	190,721	39,167	30,042	116,838	29,251
Public, total	290,060	121,408	35,957	20,068	92,872	19,755
NJ Inst of Technology	29,983	12,572	6,008	3,288	7,011	1,104
Rutgers the State U NJ	173,211	68,149	24,556	7,796	63,080	9,630
U Med & Dent NJ	86,866	40,687	5,393	8,984	22,781	9,021
Private, total	115,959	69,313	3,210	9,974	23,966	9,496
Fairleigh Dickinson U	140e	53e	2e	1e	20e	64e
Princeton University	99,287	58,544	1,033	8,089	22,189	9,432
Seton Hall University	3,072	3,072	0	0	0	0
Stevens Inst of Tech	13,460	7,644	2,175	1,884	1,757	0
New Mexico, total	191,546	118,994	14,573	13,611	30,561	13,807
Public, total	191,546	118,994	14,573	13,611	30,561	13,807
NM Inst Mining & Tech	20,945	7,582	1,956	6,057	5,226	124
New Mexico State U	80,286	59,632	10,088	3,516	5,650	1,400
University of New Mexico	90,315	51,780	2,529	4,038	19,685	12,283
New York, total	1,660,046	1,096,631	47,254	91,176	232,661	192,324
Public, total	395,439	222,428	13,535	23,490	77,121	58,865
CUNY Grad Sch & U Ctr	2,674	2,341	4	0	36	293
CUNY H H Lehman Col	1,454	1,130	0	264	60	0
SUNY Albany	59,122	32,511	6,463	1,863	5,831	12,454
SUNY Binghamton	15,803	5,100	1,433	1,502	5,502	2,266
SUNY Buffalo	141,092	81,814	3,143	8,143	16,334	31,658
SUNY Col Env Sci Frstry	21,839	3,351	928	2,044	14,839	677
SUNY Col of Optometry	680	258	0	76	306	40
SUNY Hlth Sci Ctr Brklyn	27,773	16,695	101	4,306	4,300	2,371
SUNY Hlth Sci Ctr Syrcse	11,751	6,555	36	280	793	4,087
SUNY Stony Brook	113,251	72,673	1,427	5,012	29,120	5,019
Private, total	1,264,607	874,203	33,719	67,686	155,540	133,459
Adelphi University	243e	98e	0	0	0	145e
Albany Medical College	10,324	8,344	0	0	1,503	477
Alfred University	4,712	859	1,033	2,012	755	53
CUNY Mt Sinai Sch Med	86,179	55,188	2,449	5,934	11,202	11,406
Clarkson University	10,412	6,115	800	1,658	1,839	0
Columbia University	236,417	203,101	1,569	1,632	6,300	23,815
Cornell University	312,683	193,981	8,107	17,199	66,177	27,219
Fordham University	2,241	1,304	247	0	87	603
Hofstra University	1,786	1,786	0	0	0	0
Long Island University	267	145	50	24	22	26
New Sch for Socl Res	4,383	616	0	0	0	3,767
New York Inst Technology	346	174	0	0	119	53
New York Medical College	18,725	14,913	154	1,807	0	1,851
New York University	139,202	89,013	1,381	5,929	17,099	25,780
Pace University All Cmp	0e	0e	0e	0e	0e	0e
Polytechnic University	11,869	6,872	1,300	2,589	1,008	100
Rensselaer Polytech Inst	37,191	22,090	3,070	5,925	4,890	1,216
Rochester Inst of Tech	11,528	2,478	1,660	1,420	5,646	324

See explanatory information and SOURCE at end of table

Table B-29. R&D expenditures at doctorate-granting institutions, by State, control, and source of funds: fiscal year 1994

[Dollars in thousands]

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State, control, and institution	Total	Federal Government	State and local governments	Industry	Institutional funds	All other sources
New York, continued:						
Private, continued:						
Rockefeller University	74,458	39,990	18	4,031	16,922	13,497
St John's University (NY)	1,103	862	0	241	0	0
Syracuse University	38,650	19,309	4,454	4,522	6,465	3,900
Teachers Col, Columbia U	468	190	100	31	0	147
Union College (NY)	1,054	194	39	721	100	0
University of Rochester	167,485	135,863	7,288	10,261	3,655	10,418
Yeshiva University	92,881	70,718	0	1,750	11,751	8,662
North Carolina, total	658,384	410,886	90,891	65,899	63,465	27,243
Public, total	385,583	225,814	85,929	26,594	45,408	1,838
East Carolina University	8,245	5,188	1,105	1,952	0	0
NC State U Raleigh	173,407	69,608	61,700	22,101	18,289	1,709
U of NC Chapel Hill	201,622	149,047	23,082	2,379	27,114	0
U of NC Greensboro	2,309	1,971	42	162	5	129
Private, total	272,801	185,072	4,962	39,305	18,057	25,405
Duke University	220,220	148,350	4,587	30,241	14,279	22,763
Wake Forest University	52,581	36,722	375	9,064	3,778	2,642
North Dakota, total	55,709	27,537	1,493	1,989	23,224	1,466
Public, total	55,709	27,537	1,493	1,989	23,224	1,466
North Dakota State U	36,977	10,877	1,450	1,261	22,105	1,284
University North Dakota	18,732	16,660	43	728	1,119	182
Ohio, total	623,057	357,928	49,954	49,589	103,365	62,221
Public, total	440,881	220,547	46,151	38,568	88,388	47,227
Air Force Inst of Tech	7,057	2,426	0	0	4,631	0
Bowling Green State U	3,874	2,317	133	173	1,251	0
Cleveland State U	10,570	4,620	2,531	701	2,718	0
Kent State University	11,312	6,005	899	130	3,449	829
Med Col of Ohio Toledo	12,471	8,726	223	1,164	1,811	547
Miami University (OH)	6,731	2,789	358	910	2,674	0
N.E. Ohio Univs Col Med	2,446	1,136	23	175	673	439
Ohio State University	230,515	113,186	30,692	14,883	34,858	36,896
Ohio University	16,425	5,836	2,277	2,690	5,129	493
University of Akron	16,783	4,016	2,331	4,214	5,869	353
University of Cincinnati	93,599	56,361	3,269	10,405	18,158	5,406
University of Toledo	8,043	3,505	536	1,694	1,594	714
Wright State University	21,055	9,624	2,879	1,429	5,573	1,550
Private, total	182,176	137,381	3,803	11,021	14,977	14,994
Antioch University	128	85	0	0	0	43
Case Western Reserve U	133,272	97,302	3,513	5,708	12,468	14,281
The Union Institute	1,008	0	0	0	452	556
University of Dayton	47,768	39,994	290	5,313	2,057	114
Oklahoma, total	174,585	59,053	19,275	10,958	68,401	16,898
Public, total	166,555	55,706	18,228	8,268	67,461	16,892
Oklahoma State University	70,808	20,440	7,909	3,381	35,259	3,819
University of Oklahoma	95,747	35,266	10,319	4,887	32,202	13,073
Private, total	8,030	3,347	1,047	2,690	940	6
Oral Roberts University	85	28	0	38	15	4
University of Tulsa	7,945	3,319	1,047	2,652	925	2
Oregon, total	242,822	145,737	29,042	9,672	37,826	20,545
Public, total	221,963	135,279	28,338	6,699	35,756	15,891
Oregon Health Sciences U	63,875	43,629	2	945	14,942	4,357
Oregon State University	119,772	65,069	26,877	5,110	13,862	8,854
Portland State University	7,146	4,377	896	135	1,158	580
University of Oregon	31,170	22,204	563	509	5,794	2,100

See explanatory information and SOURCE at end of table.

Table B-29. R&D expenditures at doctorate-granting institutions, by State, control, and source of funds: fiscal year 1994

[Dollars in thousands]

Page 8 of 10

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institutional funds	All other sources
Oregon, continued:						
Private, total	20,859	10,458	704	2,973	2,070	4,654
Oregon Grad Inst Sci Tech	20,859	10,458	704	2,973	2,070	4,654
Pacific University	0	0	0	0	0	0
Pennsylvania, total	1,085,034	721,488	28,190	116,168	158,084	61,104
Public, total	552,144	348,116	11,447	62,919	114,443	15,219
Indiana U of PA All Cmp	374	159	0	0	75	140
Pennsylvania State U	302,997	168,679	8,959	45,408	79,951	0
Temple University	56,308	27,140	221	6,011	19,935	3,001
University of Pittsburgh	192,465	152,138	2,267	11,500	14,482	12,078
Private, total	532,890	373,372	16,743	53,249	43,641	45,885
Bryn Mawr College	2,559	1,294	0	3	1,262	0
Carnegie Mellon U	122,580	87,790	7,042	14,112	4,769	8,867
Drexel University	20,886	11,006	1,127	5,764	2,989	0
Duquesne University	1,115	712	0	308	8	87
Lehigh University	29,188	15,363	1,264	7,303	4,490	768
Med Col PA Hahnemann U	14,745	10,194	135	1,725	2,105	586
Phila Col Osteopathic Med	469	304	21	30	91	23
Phila Col of Phar & Sci	634	250	0	384	0	0
The Medical Col of PA	30,473	16,130	4,038	3,831	5,589	885
Thomas Jefferson U	56,932	43,215	0	7,455	34	6,228
U of Pennsylvania	251,461	186,053	2,796	12,107	22,064	28,441
Villanova University	1,848	1,061	320	227	240	0
Widener U All Campuses	0	0	0	0	0	0
Rhode Island, total	101,848	69,918	3,154	2,831	23,965	1,980
Public, total	46,631	33,025	3,086	1,364	9,155	1
U of Rhode Island	46,631	33,025	3,086	1,364	9,155	1
Private, total	55,217	36,893	68	1,467	14,810	1,979
Brown University	55,146	36,864	68	1,467	14,774	1,973
Providence College	71	29	0	0	36	6
South Carolina, total	196,822	90,558	15,304	18,990	54,049	17,921
Public, total	196,822	90,558	15,304	18,990	54,049	17,921
Clemson University	76,572	24,133	13,889	5,410	28,517	4,623
Med U of South Carolina	46,249	28,507	0	5,534	1,977	10,231
U of South Carolina	74,001	37,918	1,415	8,046	23,555	3,067
South Dakota, total	21,680	9,971	7,618	581	2,616	894
Public, total	21,680	9,971	7,618	581	2,616	894
SD Sch of Mines & Tech	4,718	2,903	659	165	970	21
South Dakota State U	14,083	5,711	6,143	416	1,245	568
U of South Dakota	2,879	1,357	816	0	401	305
Tennessee, total	305,969	197,217	33,823	15,421	40,912	18,596
Public, total	185,528	94,624	33,626	12,388	32,870	12,020
East Tennessee State U	2,283	1,026	96	6	80	1,075
Memphis State University	13,305	4,027	3,718	419	4,468	673
Middle Tennessee State U	327	44	11	0	162	110
Tennessee State U	6,916	6,031	128	29	728	0
Tennessee Tech U	9,357	1,208	3,999	1,235	2,915	0
U of Tennessee System	153,340	82,288	25,674	10,699	24,517	10,162
Private, total	120,441	102,593	197	3,033	8,042	6,576
Meharry Medical College	10,336	10,154	0	0	22	160
Vanderbilt University	110,105	92,439	197	3,033	8,020	6,416

See explanatory information and SOURCE at end of table.

Table B-29. R&D expenditures at doctorate-granting institutions, by State, control, and source of funds: fiscal year 1994

[Dollars in thousands]

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institutional funds	All other sources
Texas, total	1,465,873	725,786	160,353	95,918	312,571	171,245
Public, total	1,231,889	598,928	153,098	79,091	284,730	116,042
East Texas State U	213	41	30	11	0	131
Lamar University	3,052	2,320	265	69	360	38
Sam Houston State U	2,321	1,694	321	164	142	0
Stephen F Austin St U	2,820	441	1,507	355	259	258
Texas A&M University	355,750	136,942	82,353	28,576	100,496	7,383
Texas Tech University	39,455	11,360	10,860	5,573	9,273	2,389
Texas Woman's University	1,458	714	491	253	0	0
U North TX Health Sci Ctr	5,475	4,045	382	573	0	475
U TX Arlington	17,453	4,637	5,020	3,275	4,521	0
U TX Austin	260,602	149,586	14,788	4,268	66,594	25,366
U TX Dallas	14,492	7,224	2,290	1,220	3,158	600
U TX El Paso	12,062	9,085	2,554	140	2	281
U TX Hlth Sci Ctr Houston	66,432	46,821	748	6,313	5,799	6,751
U TX Hlth Sci Ctr San Ant	83,535	51,671	8,274	7,300	11,733	4,557
U TX MD Anderson Cncr	122,357	42,416	0	0	52,929	27,012
U TX Med Br Galveston	72,773	32,775	8,785	6,115	16,841	8,257
U TX SW Med Ctr Dallas	118,398	71,468	837	13,092	5,637	27,364
University of Houston	43,131	22,830	10,386	1,183	6,099	2,633
University of North Texas	10,110	2,858	3,207	611	887	2,547
Private, total	233,984	126,858	7,255	16,827	27,841	55,203
Baylor Col of Dentistry	1,244	830	54	272	63	25
Baylor Col of Medicine	186,865	92,404	4,021	11,919	25,662	52,859
Baylor University	1,179	368	60	22	416	313
Rice University	33,309	25,672	2,427	3,837	0	1,373
Southern Methodist U	8,277	4,984	640	396	1,624	633
Texas Christian U	3,110	2,600	53	381	76	0
University of Dallas	0	0	0	0	0	0
Utah, total	201,388	135,517	14,823	8,064	34,936	8,048
Public, total	187,529	127,391	14,037	6,352	31,864	7,885
University of Utah	103,771	81,263	268	4,087	12,023	6,130
Utah State University	83,758	46,128	13,769	2,265	19,841	1,755
Private, total	13,859	8,126	786	1,712	3,072	163
Brigham Young University	13,859	8,126	786	1,712	3,072	163
Vermont, total	51,775	33,695	2,572	4,878	7,496	3,134
Public, total	51,775	33,695	2,572	4,878	7,496	3,134
University of Vermont	51,775	33,695	2,572	4,878	7,496	3,134
Virginia, total	435,997	253,145	46,990	43,198	68,421	24,243
Public, total	410,485	237,905	46,990	36,895	68,041	20,654
Col of William & Mary	20,443	10,426	1,447	831	7,283	456
George Mason University	18,871	12,679	871	508	2,594	2,219
Old Dominion University	14,911	7,888	3,422	1,061	2,540	0
University of Virginia	131,350	85,499	5,588	14,826	13,454	11,983
VA Polytech Inst & St U	148,313	73,490	33,147	12,580	25,593	3,503
Virginia Commonwealth U	76,597	47,923	2,515	7,089	16,577	2,493
Private, total	25,512	15,240	0	6,303	380	3,589
Hampton University	5,342	5,078	0	0	264	0
Institute of Textile Tech	2,297	0	0	2,239	58	0
Med Col Hampton Roads	17,873	10,162	0	4,064	58	3,589
Washington, total	438,076	326,546	11,416	36,228	48,616	15,270
Public, total	438,076	326,546	11,416	36,228	48,616	15,270
University of Washington	343,910	281,033	7,177	33,199	16,366	6,135
Washington State U	94,166	45,513	4,239	3,029	32,250	9,135

See explanatory information and SOURCE at end of table.

Table B-29. R&D expenditures at doctorate-granting institutions, by State, control, and source of funds: fiscal year 1994

[Dollars in thousands]

Page 10 of 10

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institutional funds	All other sources
West Virginia, total	59,286	35,162	1,936	4,058	14,641	3,489
Public, total	59,286	35,162	1,936	4,058	14,641	3,489
Marshall University	540	540	0	0	0	0
WV Sch of Osteo Med	142	0	0	0	142	0
West Virginia University	58,604	34,622	1,936	4,058	14,499	3,489
Wisconsin, total	466,824	267,479	68,279	19,297	58,799	52,970
Public, total	411,898	233,380	67,630	14,092	54,305	42,491
U WI Madison	392,718	225,403	61,099	13,729	51,534	40,953
U WI Milwaukee	19,180	7,977	6,531	363	2,771	1,538
Private, total	54,926	34,099	649	5,205	4,494	10,479
Marquette University	5,322	2,640	199	1,041	337	1,105
Medical Col of Wisconsin	49,604	31,459	450	4,164	4,157	9,374
Wyoming, total	33,820	15,115	3,820	1,185	12,025	1,675
Public, total	33,820	15,115	3,820	1,185	12,025	1,675
University of Wyoming	33,820	15,115	3,820	1,185	12,025	1,675
Puerto Rico, total	51,407	29,540	8,729	1,241	10,518	1,379
Public, total	46,166	25,002	8,340	1,241	10,291	1,292
U PR Mayaguez	22,967	9,369	7,750	1,241	4,607	0
U PR Med Sci Campus	17,765	11,973	564	0	4,042	1,186
U PR Rio Piedras	5,434	3,660	26	0	1,642	106
Private, total	5,241	4,538	389	0	227	87
Catholic U of PR	0	0	0	0	0	0
Ponce School of Medicine	3,102	2,874	98	0	47	83
U Ctrl Del Caribe Esc Med	2,139	1,664	291	0	180	4

NOTE: Because of rounding, figures may not add to the totals shown

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-30. R&D expenditures at doctorate-granting institutions, by geographic division, State, and science and engineering field: fiscal year 1994

[Dollars in thousands]

Page 1 of 1

Division and State	Total	Engineering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Total	20,624,144	3,270,398	2,102,894	1,343,556	910,959	11,352,536	342,728	923,863	377,210
New England	1,779,296	283,923	214,358	170,277	71,635	848,611	42,137	102,019	46,336
Connecticut	372,384	36,684	25,398	10,201	8,377	263,926	14,899	11,211	1,688
Maine	29,393	3,337	877	6,920	46	15,864	328	2,021	0
Massachusetts	1,122,344	217,888	173,977	100,797	52,619	437,697	19,616	80,721	39,029
New Hampshire	101,552	10,096	4,497	24,555	1,716	52,849	1,450	2,981	3,408
Rhode Island	101,848	13,965	8,671	27,739	8,748	31,733	5,057	5,061	874
Vermont	51,775	1,953	938	65	129	46,542	787	24	1,337
Middle Atlantic	3,151,099	492,856	264,412	127,608	181,056	1,838,372	71,062	134,987	40,746
New Jersey	406,019	70,387	46,279	25,771	24,721	183,664	13,118	29,310	12,769
New York	1,660,046	210,100	143,819	74,478	76,680	1,058,734	36,065	47,987	12,183
Pennsylvania	1,085,034	212,369	74,314	27,359	79,655	595,974	21,879	57,690	15,794
East North Central	2,958,401	509,200	320,221	99,142	111,594	1,560,617	58,403	181,483	117,741
Illinois	803,274	90,829	96,445	34,406	41,716	405,265	16,459	32,050	86,104
Indiana	335,227	54,984	61,096	4,630	12,150	169,718	7,993	16,340	8,316
Michigan	730,019	132,567	60,248	25,225	28,865	390,884	13,928	67,682	10,620
Ohio	623,057	170,047	58,766	9,996	18,024	318,304	7,992	28,928	11,000
Wisconsin	466,824	60,773	43,666	24,885	10,839	276,446	12,031	36,483	1,701
West North Central	1,399,916	176,900	86,888	40,045	45,447	961,970	16,368	52,267	20,031
Iowa	314,784	62,705	21,351	2,888	10,629	194,615	1,783	15,888	4,925
Kansas	168,880	21,901	14,395	8,231	1,978	104,281	1,958	4,583	11,553
Minnesota	317,865	30,625	15,802	11,560	21,815	219,241	6,970	11,852	0
Missouri	374,610	30,664	22,914	6,762	8,790	287,564	4,073	12,151	1,692
Nebraska	146,388	14,565	6,767	5,152	1,297	114,609	981	2,830	187
North Dakota	55,709	13,623	4,864	1,670	938	29,051	585	3,532	1,446
South Dakota	21,680	2,817	795	3,782	0	12,609	18	1,431	228
South Atlantic	3,837,808	702,323	409,329	243,624	245,444	1,956,391	54,494	185,715	40,488
Delaware	50,734	14,668	8,993	7,154	3,795	12,061	582	3,481	0
District of Columbia	151,694	10,747	14,517	856	7,102	100,843	2,886	13,652	1,091
Florida	548,686	71,493	74,552	62,344	12,522	279,166	15,734	20,603	12,272
Georgia	606,369	148,385	47,217	18,312	34,108	304,463	11,874	39,377	2,633
Maryland	1,129,836	260,113	176,653	49,536	139,936	441,397	5,168	41,709	15,324
North Carolina	658,384	66,511	32,669	25,400	17,991	470,280	9,410	35,650	473
South Carolina	196,822	37,514	13,022	14,332	9,937	100,174	1,545	13,307	6,991
Virginia	435,997	79,784	39,972	58,370	14,692	220,271	7,228	15,612	68
West Virginia	59,286	13,108	1,734	7,320	5,361	27,736	67	2,324	1,636
East South Central	842,236	141,131	65,097	29,913	26,477	528,145	9,800	23,532	18,141
Alabama	295,930	49,737	23,698	6,727	6,245	197,892	1,568	5,392	4,671
Kentucky	126,026	18,447	4,340	784	1,421	92,998	822	2,990	4,224
Mississippi	114,311	21,410	14,162	4,699	778	61,168	763	4,399	6,932
Tennessee	305,969	51,537	22,897	17,703	18,033	176,087	6,647	10,751	2,314
West South Central	1,990,495	328,569	162,861	162,316	56,735	1,168,385	17,844	77,953	15,832
Arkansas	80,577	10,220	3,861	1,915	837	59,704	472	3,041	527
Louisiana	269,460	36,820	15,315	21,920	5,586	169,413	1,382	16,382	2,642
Oklahoma	174,585	38,529	16,159	15,239	4,603	80,707	3,701	14,429	1,218
Texas	1,465,873	243,000	127,526	123,242	45,709	858,561	12,289	44,101	11,445
Mountain	1,321,986	260,708	197,714	148,676	45,163	557,839	22,750	44,156	44,980
Arizona	342,792	40,345	109,587	25,320	9,495	130,210	6,049	16,985	4,801
Colorado	361,327	54,695	47,456	48,056	14,199	170,656	11,109	8,073	7,083
Idaho	55,390	7,535	3,784	2,968	172	38,051	67	1,147	1,666
Montana	53,057	4,759	4,765	779	3,316	35,526	28	2,294	1,590
Nevada	82,666	9,649	3,180	28,334	2,071	23,336	312	5,397	10,387
New Mexico	191,546	94,143	8,859	15,697	5,957	50,017	2,081	5,998	8,794
Utah	201,388	47,422	17,479	19,898	9,462	93,076	2,837	3,986	7,228
Wyoming	33,820	2,160	2,604	7,624	491	16,967	267	276	3,431
Pacific	3,291,500	371,611	378,457	318,893	126,878	1,893,346	49,632	119,768	32,915
Alaska	76,093	3,484	15,465	35,838	90	18,053	0	3,163	0
California	2,464,430	317,329	294,875	183,723	106,256	1,427,723	36,319	83,418	14,787
Hawaii	70,079	2,403	20,223	8,141	1,151	29,589	534	3,258	4,780
Oregon	242,822	18,878	22,687	32,594	12,392	143,065	5,176	7,267	763
Washington	438,076	29,517	25,207	58,597	6,989	274,916	7,603	22,662	12,585
Outlying Areas	51,407	3,177	3,557	3,062	530	38,860	238	1,983	0

NOTE: Because of rounding, figures may not add to the totals shown.

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-31. R&D expenditures at doctorate-granting institutions, by State, control, and science and engineering field: fiscal year 1994

[Dollars in thousands]

Page 1 of 10

State, control, and institution	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
United States, total	20,624,144	3,270,398	2,102,894	1,343,556	910,959	11,352,536	342,728	923,863	377,210
Public, total	13,792,118	2,220,919	1,363,550	1,051,220	474,308	7,497,009	241,129	682,270	261,713
Private, total	6,832,026	1,049,479	739,344	292,336	436,651	3,855,527	101,599	241,593	115,497
Alabama, total	295,930	49,737	23,698	6,727	6,245	197,892	1,568	5,392	4,671
Public, total	295,930	49,737	23,698	6,727	6,245	197,892	1,568	5,392	4,671
Alabama A&M University	11,098	428	5,423	0	0	5,110	0	137	0
Auburn University	75,738	21,299	3,794	481	982	44,814	327	1,199	2,842
The University of Alabama	21,960	8,932	5,319	1,012	297	2,861	112	3,244	183
U of Alabama Birmingham	141,735	6,062	1,097	15	216	133,287	832	226	0
U of Alabama Huntsville	31,482	12,636	7,805	4,875	4,592	191	0	9	1,374
U of South Alabama	13,917	380	260	344	158	11,629	297	577	272
Alaska, total	76,093	3,484	15,465	35,838	90	18,053	0	3,163	0
Public, total	76,093	3,484	15,465	35,838	90	18,053	0	3,163	0
U of Alaska Fairbanks	76,093	3,484i	15,465i	35,838i	90i	18,053i	0i	3,163i	0i
Arizona, total	342,792	40,345	109,587	25,320	9,495	130,210	6,049	16,985	4,801
Public, total	342,792	40,345	109,587	25,320	9,495	130,210	6,049	16,985	4,801
Arizona State University	62,563	19,555	16,816	3,446	2,064	7,840	2,928	7,551	2,363
Northern Arizona U	10,290	131	1,006	1,013	135	6,168	575	768	494
University of Arizona	269,939	20,659	91,765	20,861	7,296	116,202	2,546	8,666	1,944
Arkansas, total	80,577	10,220	3,861	1,915	837	59,704	472	3,041	527
Public, total	80,577	10,220	3,861	1,915	837	59,704	472	3,041	527
U Arkansas Main	57,815	10,220	3,861	1,915	837	36,942	472	3,041	527
U Arkansas Medical Sci	22,762	0	0	0	0	22,762	0	0	0
California, total	2,464,430	317,329	294,875	183,723	106,256	1,427,723	36,319	83,418	14,787
Public, total	1,786,394	173,298	189,080	150,839	49,906	1,113,723	28,192	70,664	10,692
CA St U Long Beach	4,756i	3,572i	353i	416i	0i	376i	26i	0i	13i
San Diego St University	29,309	2,356	1,436	533	775	15,421	3,282	1,398	4,108
U CA Berkeley	289,632	61,654	59,996	4,466	4,836	122,182	6,617	24,830	5,051
U CA Davis	230,147	14,709	8,361	1,331	1,730	199,638	1,415	2,963	0
U CA Irvine	104,778	9,754	14,388	1,146	4,262	70,102	729	4,397	0
U CA Los Angeles	279,869	29,544	24,069	14,130	8,291	178,014	7,514	18,307	0
U CA Office of the Pres	0	0	0	0	0	0	0	0	0
U CA Riverside	60,995	482	6,196	3,162	970	48,368	1,044	773	0
U CA San Diego	331,901	15,806	35,450	102,266	13,542	156,724	3,998	4,115	0
U CA San Francisco	312,393	0	0	0	0	312,393	0	0	0
U CA Santa Barbara	73,619	28,477	17,084	9,789	5,710	3,133	2,852	6,462	112
U CA Santa Cruz	42,457	0	19,761	9,443	1,373	7,314	715	3,851	0
US Naval Postgrad School	26,538	6,944	1,986	4,157	8,417	58	0	3,568	1,408
Private, total	678,036	144,031	105,795	32,884	56,350	314,000	8,127	12,754	4,095
Biola University	0	0	0	0	0	0	0	0	0
C R Drew U of Med & Sci	9,347	0	0	0	0	9,347	0	0	0
CA Inst of Integral Stu	0	0	0	0	0	0	0	0	0
CA Sch Prof Psy Alameda	0	0	0	0	0	0	0	0	0
CA Sch Prof Psy Fresno	1,279	0	0	0	0	0	1,279	0	0
CA Sch Prof Psy L.A	451	0	0	0	0	0	451	0	0
CA Sch Prof Psy S Diego	25	0	0	0	0	0	25	0	0
California Inst of Tech	127,946	23,093	54,539	14,850	6,625	25,670	0	758	2,411
Claremont Graduate Sch	1,229	0	0	0	74	0	164	991	0
Col Osteo Med of Pacific	168	0	0	0	0	168	0	0	0
Fielding Institute	0	0	0	0	0	0	0	0	0
Fuller Theological Sem	35	0	0	0	0	0	35	0	0
Golden Gate University	0	0	0	0	0	0	0	0	0
Loma Linda University	9,204	0	0	223	0	8,952	0	29	0
Pacific Grad Sch of Psy	0	0	0	0	0	0	0	0	0
Pepperdine University	0	0	0	0	0	0	0	0	0
RAND Grad Sch Pol Stu	0	0	0	0	0	0	0	0	0
Santa Clara University	1,815e	989e	119e	0e	84e	254e	8e	361e	0e
Stanford University	318,561	92,946	44,030	6,192	14,513	152,104	3,710	5,066	0

See explanatory information and SOURCE at end of table.

Table B-31. R&D expenditures at doctorate-granting institutions, by State, control, and science and engineering field: fiscal year 1994

[Dollars in thousands]

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State, control, and institution	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
California, continued:									
Private, continued:									
The Wright Institute	0	0	0	0	0	0	0	0	0
U of Southern California	207,275	26,861	7,014	11,591	35,013	117,145	2,446	5,530	1,675
US International U	0	0	0	0	0	0	0	0	0
University of San Diego	641	102 i	73 i	28 i	41 i	360 i	9 i	19 i	9 i
University of the Pacific	60	40	20	0	0	0	0	0	0
Colorado, total	361,327	54,695	47,456	48,056	14,199	170,656	11,109	8,073	7,083
Public, total	354,656	54,138	44,276	48,051	14,132	169,751	9,534	7,862	6,912
Colorado School of Mines	13,880	11,035	1,459	583	803	0	0	0	0
Colorado State University	112,457	16,437	7,740	11,432	1,711	62,196	2,111	4,011	6,819
U of Northern Colorado	252	0	72	0	20	142	0	18	0
University of Colorado	228,067	26,666	35,005	36,036	11,598	107,413	7,423	3,833	93
Private, total	6,671	557	3,180	5	67	905	1,575	211	171
University of Denver	6,671	557	3,180	5	67	905	1,575	211	171
Connecticut, total	372,384	36,684	25,398	10,201	8,377	263,926	14,899	11,211	1,688
Public, total	136,740	29,561	3,819	7,614	2,945	75,294	7,440	8,379	1,688
University of Connecticut	136,740	29,561	3,819	7,614	2,945	75,294	7,440	8,379	1,688
Private, total	235,644	7,123	21,579	2,587	5,432	188,632	7,459	2,832	0
University of Hartford	157	122	0	0	0	0	35	0	0
Wesleyan University	5,112	0	2,451	288	90	1,857	217	209	0
Yale University	230,375	7,001	19,128	2,299	5,342	186,775	7,207	2,623	0
Delaware, total	50,734	14,668	8,993	7,154	3,795	12,061	582	3,481	0
Public, total	50,734	14,668	8,993	7,154	3,795	12,061	582	3,481	0
University of Delaware	50,734	14,668	8,993	7,154	3,795	12,061	582	3,481	0
District of Columbia, total	151,694	10,747	14,517	856	7,102	100,843	2,886	13,652	1,091
Private, total	151,694	10,747	14,517	856	7,102	100,843	2,886	13,652	1,091
American University	3,226	0	977	0	30	967	317	935	0
Catholic U of America	7,542	1,138	4,623	0	0	483	576	722	0
George Washington U	38,429	6,351	901	141	6,032	16,556	750	7,226	472
Georgetown University	82,661	0	4,907	715	715	72,439	81	3,557	247
Howard University	19,836	3,258	3,109	0	325	10,398	1,162	1,212	372
Florida, total	548,686	71,493	74,552	62,344	12,522	279,166	15,734	20,603	12,272
Public, total	421,582	68,710	72,436	35,054	11,519	194,083	13,621	13,951	12,208
Florida A&M University	24,691	3,600	3,072	0	173	17,464	311	71	0
Florida Atlantic U	11,236	5,909	270	95	1,190	376	1,194	2,202	0
Florida International U	13,520	4,982	424	502	1,724	5,182	405	301	0
Florida State University	76,588	1,555	46,225	11,752	1,959	8,090	2,925	4,082	0
U of Central Florida	41,362	10,747	7,776	8,909	979	947	520	376	11,108
U of South Florida	86,186	11,697	1,937	8,835	342	56,049	5,390	1,936	0
University of Florida	167,999	30,220	12,732	4,961	5,152	105,975	2,876	4,983	1,100
Private, total	127,104	2,783	2,116	27,290	1,003	85,083	2,113	6,652	64
Florida Inst of Tech	4,384	1,100	786	735	445	1,054	264	0	0
Nova University	1,245	0	0	1,027	0	11	170	0	37
University of Miami	121,475	1,683	1,330	25,528	558	84,018	1,679	6,652	27
Georgia, total	606,369	148,385	47,217	18,312	34,108	304,463	11,874	39,377	2,633
Public, total	426,599	130,071	33,764	18,175	31,633	168,578	10,475	31,698	2,205
Georgia Institute of Tech	193,630	125,004	20,390	9,459	23,775	4,996	1,473	7,060	1,473
Georgia State University	17,100	0	4,716	290	1,245	4,713	2,998	2,406	732
Medical Col of Georgia	28,020	0	0	0	0	28,020	0	0	0
University of Georgia	187,849	5,067	8,658	8,426	6,613	130,849	6,004	22,232	0

See explanatory information and SOURCE at end of table

Table B-31. R&D expenditures at doctorate-granting institutions, by State, control, and science and engineering field: fiscal year 1994

[Dollars in thousands]

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State, control, and institution	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Georgia, continued									
Private, total	179,770	18,314	13,453	137	2,475	135,885	1,399	7,679	428
Clark Atlanta University	12,709	1,447	3,880	135	2,024	4,95[illegible]	0	266	0
Emory University	136,343	0	5,495	2	451	121,583	1,399	7,413	0
Inst Paper Sci and Tech	8,995	4,456	3,867	0	0	672	0	0	0
Mercer University	14,201	12,411	211	0	0	1,579	0	0	0
Morehouse School of Med	7,522	0	0	0	0	7,094	0	0	428
Hawaii, total	70,079	2,403	20,223	8,141	1,151	29,589	534	3,258	4,780
Public, total	70,079	2,403	20,223	8,141	1,151	29,589	534	3,258	4,780
University Hawaii Manoa	70,079	2,403	20,223	8,141	1,151	29,589	534	3,258	4,780
Idaho, total	55,390	7,535	3,784	2,968	172	38,051	67	1,147	1,666
Public, total	55,390	7,535	3,784	2,968	172	38,051	67	1,147	1,666
Idaho State University	6,052	232	420	293	15	3,191	1	234	1,666
University of Idaho	49,338	7,303	3,364	2,675	157	34,860	66	913	0
Illinois, total	803,274	90,829	96,445	34,406	41,716	405,265	16,459	32,050	86,104
Public, total	406,161	65,261	50,218	29,405	22,080	157,979	8,804	25,803	46,611
Illinois State University	5,071	0	221	81	1,202	1,140	48	2,379	0
Northern Illinois U	11,445	734	2,314	540	338	2,904	405	4,210	0
Sthrn IL U Carbondale	30,497	4,529	1,719	786	2,664	14,572	375	1,553	4,299
University of IL Chicago	113,741	8,364	7,464	946	2,481	83,844	1,671	3,565	5,406
University of IL Urbana	245,407	51,634	38,500	27,052	15,395	55,519	6,305	14,096	36,906
Private, total	397,113	25,568	46,227	5,001	19,636	247,286	7,655	6,247	39,493
Chicago Sch of Prof Psy	0	0	0	0	0	0	0	0	0
De Paul University	1,329	0	20	0	107	233	907	62	0
Finch U Hlth Sci Chicago	7,057	0	0	0	0	6,950	107	0	0
Illinois Inst of Tech	8,853	3,938	1,238	421	229	2,947	15	0	65
Loyola U of Chicago	36,830	0	533	0	1,950	32,109	175	1,763	300
Midwestern University	1,928	0	0	0	0	1,928	0	0	0
Northwestern University	179,478	21,630	12,465	789	13,937	87,992	1,713	1,824	39,128
Rush University	39,736	0	0	0	0	36,304	3,432	0	0
University of Chicago	121,902	0	31,971	3,791	3,413	78,823	1,306	2,598	0
Indiana, total	335,227	54,984	61,096	4,630	12,150	169,718	7,993	16,340	8,316
Public, total	312,394	48,864	48,527	4,630	11,255	167,014	7,638	16,233	8,233
Ball State University	2,002	165	364	34	243	895	22	279	0
Indiana State University	1,042	0	129	165	0	604	0	63	81
Indiana University	136,617	890	29,262	2,350	4,149	81,488	5,248	5,275	7,955
Purdue University	172,733	47,809	18,772	2,081	6,863	84,027	2,368	10,616	197
Private, total	22,833	6,120	12,569	0	895	2,704	355	107	83
University of Notre Dame	22,833	6,120	12,569	0	895	2,704	355	107	83
Iowa, total	314,784	62,705	21,351	2,888	10,629	194,615	1,783	15,888	4,925
Public, total	314,422	62,705	21,351	2,888	10,629	194,253	1,783	15,888	4,925
Iowa State University	155,982	44,152	6,764	918	9,261	79,520	763	10,438	4,166
U of Iowa	157,036	17,841	14,569	1,588	1,368	114,664	1,014	5,233	759
U of Northern Iowa	1,404	712	18	382	0	69	6	217	0
Private, total	362	0	0	0	0	362	0	0	0
Maharishi International U	0	0	0	0	0	0	0	0	0
U Osteo Med & Hlth Sci	362	0	0	0	0	362	0	0	0

See explanatory information and SOURCE at end of table

Table B-31. R&D expenditures at doctorate-granting institutions, by State, control, and science and engineering field: fiscal year 1994

[Dollars in thousands]

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State, control, and institution	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Kansas, total	168,880	21,901	14,395	8,231	1,978	104,281	1,958	4,583	11,553
Public, total	168,880	21,901	14,395	8,231	1,978	104,281	1,958	4,583	11,553
Kansas State University	65,696	9,355	5,235	237	851	46,060	572	2,197	1,189
University of Kansas	95,701	7,278	8,411	7,742	729	57,486	1,386	2,305	10,364
Wichita State University	7,483	5,268	749	252	398	735	0	81	0
Kentucky, total	126,026	18,447	4,340	784	1,421	92,998	822	2,990	4,224
Public, total	126,014	18,447	4,340	784	1,421	92,986	822	2,990	4,224
University of Kentucky	105,539	16,900	2,422	218	1,046	78,171	776	1,782	4,224
University of Louisville	20,475	1,547	1,918	566	375	14,815	46	1,208	0
Private, total	12	0	0	0	0	12	0	0	0
Spalding University	12	0	0	0	0	12	0	0	0
Louisiana, total	269,460	36,820	15,315	21,920	5,586	169,413	1,382	16,382	2,642
Public, total	181,399	27,991	11,356	20,826	4,820	105,930	582	7,981	1,913
Louisiana St U, All Camp	165,857	22,781	10,811	20,537	1,730	102,957	474	5,440	1,127
Louisiana Tech University	2,315	1,627	0	0	0	553	0	0	135
Northeast Louisiana U	2,128	0	0	103	112	387	0	1,526	0
U of Southwestern LA	11,099	3,583	545	186	2,978	2,033	108	1,015	651
Private, total	88,061	8,829	3,959	1,094	766	63,483	800	8,401	729
Tulane University	83,885	8,829	2,944	240	744	61,322	800	8,401	605
Xavier University of LA	4,176	0	1,015	854	22	2,161	0	0	124
Maine, total	29,393	3,337	877	6,920	46	15,864	328	2,021	0
Public, total	29,393	3,337	877	6,920	46	15,864	328	2,021	0
U of Maine	29,393	3,337	877	6,920	46	15,864	328	2,021	0
Maryland, total	1,129,836	260,113	176,653	49,536	139,936	441,397	5,168	41,709	15,324
Public, total	345,793	49,591	59,465	8,943	20,639	171,083	4,147	31,925	0
U MD Baltimore County	8,117	2,025e	3,084	0	769	1,636	348	255	0
U MD Baltimore Prof Sch	110,866	0	0	0	0	110,866	0	0	0
U MD College Park	198,348	47,556	56,381	8,932	19,849	30,341	3,799	31,490	0
U MD Eastern Shore	1,128	10	0	11	21	906	0	180	0
Unif Svcs U of Hlth Sci	27,334	0	0	0	0	27,334	0	0	0
Private, total	784,043	210,522	117,188	40,593	119,297	270,314	1,021	9,784	15,324
Johns Hopkins U	784,043	210,522	117,188	40,593	119,297	270,314	1,021	9,784	15,324
Massachusetts, total	1,122,344	217,888	173,977	100,797	52,619	437,697	19,616	80,721	39,029
Public, total	153,251	15,888	21,575	8,467	13,274	83,064	3,083	7,583	317
U MA Amherst	65,344	9,962	15,835	6,386	12,704	17,229	2,547	542	139
U MA Boston	10,962	0	321	2,006	44	1,574	387	6,630	0
U MA Lowell	15,155	5,926	5,419	75	526	2,471	149	411	178
U MA Worcester	61,790	0	0	0	0	61,790	0	0	0
Private, total	969,093	202,000	152,402	92,330	39,345	354,633	16,533	73,138	38,712
Boston College	10,724	0	3,002	612	5,343	1,171	174	422	0
Boston University	90,504	7,732	9,701	1,168	2,761	64,285	188	1,302	3,367
Brandeis University	34,835	0	3,736	0	1,132	15,807	1,578	12,582	0
Clark University	2,711	0	1,512	689	56	131	246	77	0
Harvard University	278,459e	6,027e	31,718e	9,714e	4,169e	168,143e	3,117e	46,480e	9,091e
MA Col Phar Allied Hlth	222	0	0	0	0	222	0	0	0
MA Institute of Tech	363,918	153,530	95,154	16,094	18,514	37,690	8,503	8,179	26,254
Northeastern University	19,104	7,572	3,630	0	1,435	4,349	941	1,177	0
Smith College	1,920	0	351	78	211	840	136	304	0
Tufts University	73,749	4,521	3,190	1	191	61,668	1,650	2,528	0
Woods Hole Oceanograph	81,345	17,371	0	63,974	0	0	0	0	0
Worcester Polytech Inst	11,602	5,247	408	0	5,533	327	0	87	0

See explanatory information and SOURCE at end of table.

Table B-31. R&D expenditures at doctorate-granting institutions, by State, control, and science and engineering field: fiscal year 1994

[Dollars in thousands]

State, control, and institution	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Michigan, total	730,019	132,567	60,248	25,225	28,865	390,884	13,928	67,682	10,620
Public, total	727,245	132,048	59,378	24,354	28,860	390,794	13,923	67,559	10,329
Central Michigan U	1,334	124	382	103	115	233	250	127	0
Michigan State University	163,285	18,223	23,638	431	6,419	101,327	2,303	9,353	1,591
Michigan Tech University	21,786	14,714	1,938	1,279	240	2,953	0	458	204
Oakland University	6,285	906	597	0	363	4,175	47	12	185
University of Michigan	430,778	88,837	22,972	20,823	19,186	212,198	9,098	51,094	6,570
Wayne State University	94,632	7,704	9,526	0	669	69,159	2,221	3,661	1,692
Western Michigan U	9,145	1,540	325	1,718	1,868	749	4	2,854	87
Private, total	2,774	519	870	871	5	90	5	123	291
Andrews University	247	1	23	0	5	90	5	123	0
U of Detroit Mercy	2,527	518	847	871	0	0	0	0	291
Minnesota, total	317,865	30,625	15,802	11,560	21,815	219,241	6,970	11,852	0
Public, total	317,865	30,625	15,802	11,560	21,815	219,241	6,970	11,852	0
University of Minnesota	317,865	30,625	15,802	11,560	21,815	219,241	6,970	11,852	0
Private, total	0	0	0	0	0	0	0	0	0
Mayo Grad Sch of Med	0	0	0	0	0	0	0	0	0
Mississippi, total	114,311	21,410	14,162	4,699	778	61,168	763	4,399	6,932
Public, total	114,311	21,410	14,162	4,699	778	61,168	763	4,399	6,932
Jackson State University	4,697	76	1,851	0	165	2,075	525	5	0
Mississippi State U	76,201	17,936	3,500	3,587	385	41,822	0	3,451	5,520
U Southern Mississippi	8,413	108	4,486	1,112	151	941	3	200	1,412
U Mississippi, All Camp	25,000	3,290	4,325	0	77	16,330	235	743	0
Missouri, total	374,610	30,664	22,914	6,762	8,790	287,564	4,073	12,151	1,692
Public, total	159,786	26,396	14,844	2,521	2,435	97,621	3,203	11,173	1,593
U of Missouri Columbia	121,256	12,381	8,721	1,648	848	86,852	2,341	8,424	41
U of Missouri Kansas City	11,420	0	747	10	960	8,378	440	479	406
U of Missouri Rolla	19,706	14,015	3,183	863	465	843	0	12	325
U of Missouri St Louis	6,664	0	2,193	0	162	830	422	2,258	799
U of Missouri Sys Admn	740	0	0	0	0	718	0	0	22
Private, total	214,824	4,268	8,070	4,241	6,355	189,943	870	978	99
Forest Inst of Prof Psy	48	0	0	0	0	0	48	0	0
Kirksville Col Osteo Med	836	0	0	0	0	836	0	0	0
St Louis University	20,844	4	0	736	64	19,937	0	4	99
U of Health Sci (MO)	718	0	0	0	0	718	0	0	0
Washington University	192,378	4,264	8,070	3,505	6,291	168,452	822	974	0
Montana, total	53,057	4,759	4,765	779	3,316	35,526	28	2,294	1,590
Public, total	53,057	4,759	4,765	779	3,316	35,526	28	2,294	1,590
Montana State University	36,149	4,759	3,857	388	475	24,839	0	1,538	293
University of Montana	16,908	0	908	391	2,841	10,687	28	756	1,297
Nebraska, total	146,388	14,565	6,767	5,152	1,297	114,609	981	2,830	187
Public, total	136,743	14,565	6,535	5,151	1,297	105,197	981	2,830	187
U of NE Med Ctr Omaha	33,997	0	0	0	0	33,997	0	0	0
U of Nebraska Lincoln	102,746	14,565	6,535	5,151	1,297	71,200	981	2,830	187
Private, total	9,645	0	232	1	0	9,412	0	0	0
Creighton University	9,645	0	232	1	0	9,412	0	0	0

See explanatory information and SOURCE at end of table.

Table B-31. R&D expenditures at doctorate-granting institutions, by State, control, and science and engineering field: fiscal year 1994

[Dollars in thousands]

State, control, and institution	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Nevada, total	82,666	9,649	3,180	28,334	2,071	23,336	312	5,397	10,387
Public, total	82,666	9,649	3,180	28,334	2,071	23,336	312	5,397	10,387
Desert Research Institute	21,459	0	0	14,122	0	4,128	0	3,209	0
U of Nevada Las Vegas	19,031	2,549	1,594	10,123	1,970	1,960	7	828	0
U of Nevada Reno	42,176	7,100	1,586	4,089	101	17,248	305	1,360	10,387
New Hampshire, total	101,552	10,096	4,497	24,555	1,716	52,849	1,450	2,981	3,408
Public, total	43,707	3,551	1,469	23,016	773	8,980	458	2,315	3,145
U of New Hampshire	43,707	3,551	1,469	23,016	773	8,980	458	2,315	3,145
Private, total	57,845	6,545	3,028	1,539	943	43,869	992	666	263
Dartmouth College	57,845	6,545	3,028	1,539	943	43,869	992	666	263
New Jersey, total	406,019	70,387	46,279	25,771	24,721	183,664	13,118	29,310	12,769
Public, total	290,060	34,341	18,932	17,581	16,036	165,250	6,830	18,353	12,737
NJ Inst of Technology	29,983	8,952	1,811	7,683	2,274	0	0	302	8,961
Rutgers the State U NJ	173,211	25,389	17,121	9,898	13,762	78,384	6,830	18,051	3,776
U Med & Dent NJ	86,866	0	0	0	0	86,866	0	0	0
Private, total	115,959	36,046	27,347	8,190	8,685	18,414	6,288	10,957	32
Fairleigh Dickinson U	140e	0e	22e	0e	16e	19e	7e	44e	32e
Princeton University	99,287	24,454	25,463	8,190	8,561	16,239	6,281	10,099	0
Seton Hall University	3,072	0i	916i	0i	0i	2,156i	0i	0i	0i
Stevens Inst of Tech	13,460	11,592	946	0	108	0	0	814	0
New Mexico, total	191,546	94,143	8,859	15,697	5,957	50,017	2,081	5,998	8,794
Public, total	191,546	94,143	8,859	15,697	5,957	50,017	2,081	5,998	8,794
NM Inst Mining & Tech	20,945	14,617	1,690	3,845	536	226	18	13	0
New Mexico State U	80,286	43,255	2,730	9,585	2,893	19,327	62	811	1,623
University of New Mexico	90,315	36,271	4,439	2,267	2,528	30,464	2,001	5,174	7,171
New York, total	1,660,046	210,100	143,819	74,478	76,680	1,058,734	36,065	47,987	12,183
Public, total	395,439	37,267	38,160	26,777	16,489	242,159	17,093	17,192	302
CUNY Grad Sch & U Ctr	2,674	0	0	0	279	1,531	367	497	0
CUNY H H Lehman Col	1,454	0	174	3	172	261	736	108	0
SUNY Albany	59,122	0	3,301	6,776	706	37,996	4,039	6,304	0
SUNY Binghamton	15,803	2,713	2,084	982	1,650	2,403	3,318	2,653	0
SUNY Buffalo	141,092	23,271	8,108	846	7,383	91,711	5,607	4,009	157
SUNY Col Env Sci Frstry	21,839	7,042	1,314	2,239	0	11,104	0	140	0
SUNY Col of Optometry	680e	0	0	0	0	680e	0	0	0
SUNY Hlth Sci Ctr Brklyn	27,773	0	0	0	0	27,773	0	0	0
SUNY Hlth Sci Ctr Syrcse	11,751	0	0	0	0	11,751	0	0	0
SUNY Stony Brook	113,251	4,241	23,179	15,931	6,299	56,949	3,026	3,481	145
Private, total	1,264,607	172,833	105,659	47,701	60,191	816,575	18,972	30,795	11,881
Adelphi University	243e	0	228e	0	0	13e	2e	0	0
Albany Medical College	10,324	0	0	0	0	10,324	0	0	0
Alfred University	4,712	4,712	0	0	0	0	0	0	0
CUNY Mt Sinai Sch Med	86,179	0	0	0	0	86,179	0	0	0
Clarkson University	10,412	7,323	2,084	0	794	142	69	0	0
Columbia University	236,417	14,407	21,433	39,786	4,637	148,100	2,386	5,668	0
Cornell University	312,683	41,416	45,211	4,389	23,614	184,425	3,670	9,958	0
Fordham University	2,241	0	17	0	71	795	47	1,311	0
Hofstra University	1,786	988	0	0	563	235	0	0	0
Long Island University	267	7	41	50	0	35	0	134	0
New Sch for Socl Res	4,383	0	0	0	0	184	445	3,754	0
New York Inst Technology	346	135	0	0	0	211	0	0	0
New York Medical College	18,725	0	0	0	0	18,725	0	0	0
New York University	139,202	0	3,466	676	12,948	110,518	4,686	5,836	1,072
Pace University All Cmp	0e	0e	0e	0e	0e	0e	0e	0e	0e
Polytechnic University	11,869	7,795	1,551	0	2,523	0	0	0	0
Rensselaer Polytech Inst	37,191	26,012	6,416	1,092	2,583	563	59	251	215
Rochester Inst of Tech	11,528	603i	7i	0i	31i	1,715i	0i	61i	9,111i

See explanatory information and SOURCE at end of table.

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Table B-31. R&D expenditures at doctorate-granting institutions, by State, control, and science and engineering field: fiscal year 1994

[Dollars in thousands]

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State, control, and institution	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
New York, continued:									
Private, continued:									
Rockefeller University	74,458	0	6,028	0	1,291	67,139	0	0	0
St John's University (NY)	1,103	0	5	0	0	857	223	18	0
Syracuse University	38,650	13,214	5,896	1,294	8,225	4,904	975	3,213	929
Teachers Col, Columbia U	468	0	0	0	110	0	312	46	0
Union College (NY)	1,054	441	150	32	7	263	97	10	54
University of Rochester	167,485	55,780	13,126	382	2,794	88,367	6,001	535	500
Yeshiva University	92,881	0	0	0	0	92,881	0	0	0
North Carolina, total	658,384	66,511	32,669	25,400	17,991	470,280	9,410	35,650	473
Public, total	385,583	58,871	19,169	22,100	15,101	244,864	3,305	22,074	99
East Carolina University	8,245	0	216	1,036	13	6,567	0	325	88
NC State U Raleigh	173,407	58,871	9,379	9,651	5,651	86,319	256	3,280	0
U of NC Chapel Hill	201,622	0	9,415	11,413	9,404	150,449	2,727	18,214	0
U of NC Greensboro	2,309	0	159	0	33	1,529	322	255	11
Private, total	272,801	7,640	13,500	3,300	2,890	225,416	6,105	13,576	374
Duke University	220,220	7,640	12,323	3,300	2,826	174,326	6,105	13,576	124
Wake Forest University	52,581	0	1,177	0	64	51,090	0	0	250
North Dakota, total	55,709	13,623	4,864	1,670	938	29,051	585	3,532	1,446
Public, total	55,709	13,623	4,864	1,670	938	29,051	585	3,532	1,446
North Dakota State U	36,977	3,190	4,684	205	938	25,000	582	2,176	202
University North Dakota	18,732	10,433	180	1,465	0	4,051	3	1,356	1,244
Ohio, total	623,057	170,047	58,766	9,996	18,024	318,304	7,992	28,928	11,000
Public, total	440,881	103,454	51,224	9.522	17,260	219,695	5,528	23,637	10,561
Air Force Inst of Tech	7,057	5,922	0	237	898	0	0	0	0
Bowling Green State U	3,874	412	1,272	41	31	1,154	462	325	177
Cleveland State U	10,570	4,155	764	3	64	1,007	119	4,458	0
Kent State University	11,312	233	8,025	307	658	731	1,204	141	13
Med Col of Ohio Toledo	12,471	0	0	111	61	12,299	0	0	0
Miami University (OH)	6,731	195i	1,795i	213i	3i	1,587i	484i	1,094i	1,360i
N.E. Ohio Univs Col Med	2,446	0	0	0	0	2,446	0	0	0
Ohio State University	230,515	51,162	19,834	7,644	11,072	117,294	1,517	16,218	5,774
Ohio University	16,425	8,606	1,883	95	66	4,666	212	211	686
University of Akron	16,783	5,969	8,325	172	741	1,154	121	301	0
University of Cincinnati	93,599	19,430	4,736	351	586	65,469	420	540	2,067
University of Toledo	8,043	4,124	2,726	35	71	592	231	264	0
Wright State University	21,055	3.246	1,864	313	3,009	11,296	758	85	484
Private, total	182,176	66.593	7,542	474	764	98,609	2,464	5,291	439
Antioch University	128	0	0	0	0	128	0	0	0
Case Western Reserve U	133,272	24,859	5,422	315	301	98,002	515	3,858	0
The Union Institute	1,008	0	0	0	0	0	0	1,008	0
University of Dayton	47,768	41,734	2,120	159	463	479	1,949	425	439
Oklahoma, total	174,585	38,529	16,159	15,239	4,603	80,707	3,701	14,429	1,218
Public, total	166,555	33,812	15,574	14,545	4,310	79,331	3,469	14,296	1,218
Oklahoma State University	70,808	19,753	7,008	1,890	903	35,751	162	4,123	1,218
University of Oklahoma	95,747	14,059	8,566	12,655	3,407	43,580	3,307	10,173	0
Private, total	8,030	4,717	585	694	293	1,376	232	133	0
Oral Roberts University	85	0	7	78	0	0	0	0	0
University of Tulsa	7,945	4,717	578	616	293	1,376	232	133	0
Oregon, total	242,822	18,878	22,687	32,594	12,392	143,065	5,176	7,267	763
Public, total	221,963	15,014	16,516	28,963	5,199	143,065	5,176	7,267	763
Oregon Health Sciences U	63,875	0	0	0	0	60,871	3,004	0	0
Oregon State University	119,772	12,107	4,154	25,740	2,080	72,240	110	2,769	572
Portland State University	7,146	826	239	1,620	935	740	45	2,550	191
University of Oregon	31,170	2,081	12,123	1,603	2,184	9,214	2,017	1,948	0

See explanatory information and SOURCE at end of table.

Table B-31. R&D expenditures at doctorate-granting institutions, by State, control, and science and engineering field: fiscal year 1994

[Dollars in thousands]

Page 8 of 10

State, control, and institution	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Oregon, continued:									
Private, total	20,859	3,864	6,171	3,631	7,193	0	0	0	0
Oregon Grad Inst Sci Tech	20,859	3,864	6,171	3,631	7,193	0	0	0	0
Pacific University	0	0	0	0	0	0	0	0	0
Pennsylvania, total	1,085,034	212,369	74,314	27,359	79,655	595,974	21,879	57,690	15,794
Public, total	552,144	137,884	35,846	21,656	6,607	293,803	13,225	28,493	14,630
Indiana U of PA All Cmp	374	0	85	9	11	114	38	117	0
Pennsylvania State U	302,997	129,313	22,486	21,360	3,518	96,520	6,393	10,409	12,998
Temple University	56,308	400	1,096	17	545	39,870	4,416	9,546	418
University of Pittsburgh	192,465	8,171	12,179	270	2,533	157,299	2,378	8,421	1,214
Private, total	532,890	74,485	38,468	5,703	73,048	302,171	8,654	29,197	1,164
Bryn Mawr College	2,559	0	645	479	376	604	213	242	0
Carnegie Mellon U	122,580	28,153	7,551	1,711	61,726	11,597	5,625	5,053	1,164
Drexel University	20,886	12,143	1,800	1,566	2,125	991	0	2,261	0
Duquesne University	1,115	0	319	0	2	784	0	10	0
Lehigh University	29,188	21,795	4,664	1,146	357	660	310	256	0
Med Col PA Hahnemann U	14,745	0	0	0	0	14,745	0	0	0
Phila Col Osteopathic Med	469	0	0	0	0	469	0	0	0
Phila Col of Phar & Sci	634	0	0	0	0	634	0	0	0
The Medical Col of PA	30,473	0	0	0	0	30,473	0	0	0
Thomas Jefferson U	56,932	0	0	0	0	56,932	0	0	0
U of Pennsylvania	251,461	11,918	23,245	801	8,408	183,502	2,296	21,291	0
Villanova University	1,848	476	244	0	54	780	210	84	0
Widener U All Campuses	0	0	0	0	0	0	0	0	0
Rhode Island, total	101,848	13,965	8,671	27,739	8,748	31,733	5,057	5,061	874
Public, total	46,631	5,415	1,149	22,534	278	10,158	3,450	2,773	874
U of Rhode Island	46,631	5,415 i	1,149 i	22,534 i	278 i	10,158 i	3,450 i	2,773 i	874 i
Private, total	55,217	8,550	7,522	5,205	8,470	21,575	1,607	2,288	0
Brown University	55,146	8,550	7,492	5,202	8,470	21,537	1,607	2,288	0
Providence College	71	0	30	3	0	38	0	0	0
South Carolina, total	196,822	37,514	13,022	14,332	9,937	100,174	1,545	13,307	6,991
Public, total	196,822	37,514	13,022	14,332	9,937	100,174	1,545	13,307	6,991
Clemson University	76,572	24,055	5,376	741	3,667	35,024	236	5,861	1,612
Med U of South Carolina	46,249	0	0	0	0	46,249	0	0	0
U of South Carolina	74,001	13,459	7,646	13,591	6,270	18,901	1,309	7,446	5,379
South Dakota, total	21,680	2,817	795	3,782	0	12,609	18	1,431	228
Public, total	21,680	2,817	795	3,782	0	12,609	18	1,431	228
SD Sch of Mines & Tech	4,718	2,005	0	2,622	0	0	0	0	91
South Dakota State U	14,083	812	178	1,112	0	11,344	0	637	0
U of South Dakota	2,879	0	617	48	0	1,265	18	794	137
Tennessee, total	305,969	51,537	22,897	17,703	18,033	176,087	6,647	10,751	2,314
Public, total	185,528	40,958	14,841	16,065	17,260	83,353	3,667	7,070	2,314
East Tennessee State U	2,283	0	45	209	0	2,009	0	20	0
Memphis State University	13,305	1,722	289	2,738	423	1,753	3,441	1,818	1,121
Middle Tennessee State U	327	0	47	5	27	69	63	116	0
Tennessee State U	6,916	1,506	442	0	237	4,724	0	0	7
Tennessee Tech U	9,357	7,843	488	44	17	932	0	33	0
U of Tennessee System	153,340	29,887	13,530	13,069	16,556	73,866	163	5,083	1,186
Private, total	120,441	10,579	8,056	1,638	773	92,734	2,980	3,681	0
Meharry Medical College	10,336	0	0	1,561	0	8,775	0	0	0
Vanderbilt University	110,105	10,579	8,056	77	773	83,959	2,980	3,681	0

See explanatory information and SOURCE at end of table.

Table B-31. R&D expenditures at doctorate-granting institutions, by State, control, and science and engineering field: fiscal year 1994

[Dollars in thousands]

State, control, and institution	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Texas, total	1,465,873	243,000	127,526	123,242	45,709	858,561	12,289	44,101	11,445
Public, total	1,231,889	237,183	115,700	117,139	32,713	664,804	9,966	43,555	10,829
East Texas State U	213	0	117	0	2	90	0	4	0
Lamar University	3,052	723	848	870	135	228	72	117	59
Sam Houston State U	2,321	0	739	1,002	160	135	48	237	0
Stephen F Austin St U	2,820	0	88	31	1	2,554	51	86	9
Texas A&M University	355,750	82,565	21,890	80,878	6,963	141,130	1,570	17,547	3,207
Texas Tech University	39,455	9,513	4,070	1,017	1,194	20,018	74	3,141	428
Texas Woman's University	1,458	0	62	0	136	1,060	5	12	183
U North TX Health Sci Ctr	5,475	0	0	0	0	5,351	0	0	124
U TX Arlington	17,453	9,764	2,641	535	2,782	649	46	252	784
U TX Austin	260,602	106,743	64,108	25,826	15,897	23,584	3,961	16,183	4,300
U TX Dallas	14,492	1,082	5,622	2,185	562	3,189	561	1,291	0
U TX El Paso	12,062	4,177	1,015	1,604	661	2,717	102	1,757	29
U TX Hlth Sci Ctr Houston	66,432	0	0	0	0	65,238	0	1,194	0
U TX Hlth Sci Ctr San Ant	83,535	0	0	0	0	83,535	0	0	0
U TX MD Anderson Cncr	122,357	0	3,112	0	2,096	117,149	0	0	0
U TX Med Br Galveston	72,773	0	0	0	0	72,773	0	0	0
U TX SW Med Ctr Dallas	118,398	0	0	0	0	118,398	0	0	0
University of Houston	43,131	21,961	8,755	1,379	1,309	5,630	2,973	1,062	62
University of North Texas	10,110	655	2,633	1,812	815	1,376	503	672	1,644
Private, total	233,984	5,817	11,826	6,103	12,996	193,757	2,323	546	616
Baylor Col of Dentistry	1,244	0	0	0	0	1,244	0	0	0
Baylor Col of Medicine	186,865	0	0	0	0	186,865	0	0	0
Baylor University	1,179	0	607	87	58	308	0	55	64
Rice University	33,309	4,627	8,943	3,671	11,708	3,967	313	80	0
Southern Methodist U	8,277	1,157	1,442	2,312	1,201	1,157	67	389	552
Texas Christian U	3,110	33	834	33	29	216	1,943	22	0
University of Dallas	0	0	0	0	0	0	0	0	0
Utah, total	201,388	47,422	17,479	19,898	9,462	93,076	2,837	3,986	7,228
Public, total	187,529	41,084	15,092	19,782	8,991	90,315	2,697	2,488	7,080
University of Utah	103,771	15,636	9,215	4,870	8,549	63,996	1,033	472	0
Utah State University	83,758	25,448	5,877	14,912	442	26,319	1,664	2,016	7,080
Private, total	13,859	6,338	2,387	116	471	2,761	140	1,498	148
Brigham Young University	13,859	6,338	2,387	116	471	2,761	140	1,498	148
Vermont, total	51,775	1,953	938	65	129	46,542	787	24	1,337
Public, total	51,775	1,953	938	65	129	46,542	787	24	1,337
University of Vermont	51,775	1,953	938	65	129	46,542	787	24	1,337
Virginia, total	435,997	79,784	39,972	58,370	14,692	220,271	7,228	15,612	68
Public, total	410,485	77,882	35,299	58,218	13,804	202,374	7,228	15,612	68
Col of William & Mary	20,443	0	4,093	13,723	474	585	155	1,413	0
George Mason University	18,871	7,003	2,888	0	3,551	1,452	550	3,427	0
Old Dominion University	14,911	5,415	1,674	5,061	887	1,381	47	446	0
University of Virginia	131,350	21,542	14,644	6,653	4,859	76,442	3,084	4,058	68
VA Polytech Inst & St U	148,313	43,623	9,187	32,781	3,796	51,945	2,031	4,950	0
Virginia Commonwealth U	76,597	299	2,813	0	237	70,569	1,361	1,318	0
Private, total	25,512	1,902	4,673	152	888	17,897	0	0	0
Hampton University	5,342	365	4,156	152	645	24	0	0	0
Institute of Textile Tech	2,297	1,537	517	0	243	0	0	0	0
Med Col Hampton Roads	17,873	0	0	0	0	17,873	0	0	0
Washington, total	438,076	29,517	25,207	58,597	6,989	274,916	7,603	22,662	12,585
Public, total	438,076	29,517	25,207	58,597	6,989	274,916	7,603	22,662	12,585
University of Washington	343,910	20,332	19,375	57,912	6,516	218,998	7,321	10,675	2,781
Washington State U	94,166	9,185	5,832	685	473	55,918	282	11,987	9,804

See explanatory information and SOURCE at end of table

Table B-31. R&D expenditures at doctorate-granting institutions, by State, control, and science and engineering field: fiscal year 1994

[Dollars in thousands]

Page 10 of 10

State, control, and institution	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
West Virginia, total	59,286	13,108	1,734	7,320	5,361	27,736	67	2,324	1,636
Public, total	59,286	13,108	1,734	7,320	5,361	27,736	67	2,324	1,636
Marshall University	540	0	0	0	0	540	0	0	0
WV Sch of Osteo Med	142	0	0	0	0	142	0	0	0
West Virginia University	58,604	13,108	1,734	7,320	5,361	27,054	67	2,324	1,636
Wisconsin, total	466,824	60,773	43,666	24,885	10,839	276,446	12,031	36,483	1,701
Public, total	411,898	58,584	43,243	24,885	10,521	224,714	11,987	36,263	1,701
U WI Madison	392,718	55,021	39,838	21,898	10,031	222,482	11,540	31,028	880
U WI Milwaukee	19,180	3,563	3,405	2,987	490	2,232	447	5,235	821
Private, total	54,926	2,189	423	0	318	51,732	44	220	0
Marquette University	5,322	2,189	423	0	318	2,128	44	220	0
Medical Col of Wisconsin	49,604	0	0	0	0	49,604	0	0	0
Wyoming, total	33,820	2,160	2,604	7,624	491	16,967	267	276	3,431
Public, total	33,820	2,160	2,604	7,624	491	16,967	267	276	3,431
University of Wyoming	33,820	2,160	2,604	7,624	491	16,967	267	276	3,431
Puerto Rico, total	51,407	3,177	3,557	3,062	530	38,860	238	1,983	0
Public, total	46,166	3,177	3,557	3,062	530	33,806	238	1,796	0
U PR Mayaguez	22,967	3,002	1,235	3,062	373	14,908	0	387	0
U PR Med Sci Campus	17,765	0	0	0	0	17,765	0	0	0
U PR Rio Piedras	5,434	175	2,322	0	157	1,133	238	1,409	0
Private, total	5,241	0	0	0	0	5,054	0	187	0
Catholic U of PR	0	0	0	0	0	0	0	0	0
Ponce School of Medicine	3,102	0	0	0	0	3,102	0	0	0
U Ctrl Del Caribe Esc Med	2,139	0	0	0	0	1,952	0	187	0

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-32. Total R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
Total, all institutions	21,081,209	19,940,112	18,806,571	17,578,882	16,284,988	14,976,037	13,463,043	12,152,829
1 Johns Hopkins U[1]	784,043	745,515	735,542	710,095	668,915	648,395	557,016	510,896
2 University of Michigan	430,778	425,868	393,059	363,582	310,578	280,905	250,169	224,890
3 U WI Madison	392,718	372,362	352,706	326,489	309,841	285,982	271,418	254,493
4 MA Institute of Tech[2]	363,918	365,553	324,453	318,901	311,767	287,157	270,584	264,416
5 Texas A&M University	355,750	322,691	305,390	288,005	272,800	250,706	231,161	219,853
6 University of Washington	343,910	335,329	313,514	274,423	245,313	221,712	190,735	187,062
7 U CA San Diego	331,901	307,051	282,114	261,422	237,032	216,991	200,472	183,047
8 Stanford University	318,561	306,676	367,980	314,941	299,511	285,994	277,504	240,885
9 University of Minnesota	317,865	332,033	317,026	331,471	292,046	258,614	236,115	222,381
10 Cornell University[2]	312,683	310,949	299,342	309,535	300,144	286,733	271,659	253,971
Total, 1st 10 insts.	3,952,127	3,824,027	3,691,126	3,498,864	3,247,947	3,023,189	2,756,833	2,561,894
11 U CA San Francisco	312,393	314,599	295,784	268,700	238,278	219,446	193,289	169,436
12 Pennsylvania State U	302,997	282,659	278,305	267,816	256,926	219,930	188,444	165,841
13 U CA Berkeley[2]	289,632	284,346	284,545	258,038	231,061	209,967	186,372	175,273
14 U CA Los Angeles	279,869	277,974	270,954	250,033	246,795	227,828	209,338	188,831
15 Harvard University	278,459e	257,207	253,126	229,939	220,812	209,519	190,429	169,074
16 University of Arizona	269,939	235,528	221,999	213,726	195,633	174,119	155,464	138,726
17 U TX Austin	260,602	249,158	228,545	237,043	228,203	193,337	172,608	168,931
18 U of Pennsylvania	251,461	233,829	222,424	198,221	189,390	173,744	159,218	158,334
19 University of IL Urbana	245,407	252,811	251,970	243,380	225,634	210,590	197,393	188,682
20 Columbia University	236,417	204,710	199,516	194,666	182,769	172,145	160,976	149,904
Total, 1st 20 insts.	6,679,303	6,416,848	6,198,294	5,860,426	5,463,448	5,033,814	4,570,364	4,234,926
21 Ohio State University	230,515	221,460	203,291	194,919	178,569	173,485	154,652	123,246
22 Yale University	230,375	226,850	211,569	193,893	180,706	171,139	162,188	145,818
23 U CA Davis	230,147	223,758	209,282	200,664	198,075	180,297	154,655	143,798
24 University of Colorado	228,067	193,217	176,266	160,526	154,723	143,720	128,015	112,276
25 Duke University	220,220	202,434	188,678	164,232	140,708	131,090	113,968	89,556
26 U of Southern California	207,275	200,822	194,740	175,595	169,102	162,013	150,009	134,995
27 U of NC Chapel Hill	201,622	179,157	161,549	142,681	123,113	122,097	107,039	93,754
28 U MD College Park	198,348	229,344	219,041	206,432	166,022	149,510	135,531	126,239
29 Georgia Institute of Tech	193,630	175,873	180,263	176,729	168,193	174,664	143,051	120,342
30 University of Pittsburgh	192,465	178,778	157,250	130,322	117,716	111,265	98,609	84,183
Total, 1st 30 insts.	8,811,967	8,448,541	8,100,223	7,606,419	7,060,375	6,553,094	5,918,081	5,409,133
31 Washington University	192,378	179,329	170,339	160,464	151,249	128,419	117,829	103,419
32 University of Georgia	187,849	172,274	165,279	162,992	156,742	145,953	137,692	124,442
33 Baylor Col of Medicine	186,865	172,252	167,998	161,084	155,122	134,681	106,814	90,179
34 Northwestern University	179,478	162,299	141,975	144,809	133,151	118,991	102,755	88,920
35 NC State U Raleigh	173,407	155,624	143,008	142,606	131,133	123,441	110,286	102,647
36 Rutgers the State U NJ	173,211	161,025	162,089	151,335	137,985	124,574	105,150	94,555
37 Purdue University	172,733	149,032	140,260	136,325	130,379	124,323	118,797	107,131
38 University of Florida	167,999	142,966	140,189	140,257	139,678	125,770	107,177	104,245
39 University of Rochester[2]	167,485	161,810	139,992	131,777	129,011	123,997	114,061	101,598
40 Louisiana St U, All Camp	165,857	158,823	151,844	147,626	135,849	122,357	114,698	102,070
Total, 1st 40 insts.	10,579,229	10,063,975	9,623,196	9,085,694	8,460,674	7,825,600	7,053,340	6,428,339
41 Michigan State University	163,285	150,861	142,308	133,249	126,987	121,456	116,320	111,810
42 U of Iowa	157,036	148,811	135,418	124,058	115,778	105,900	94,552	79,090
43 Iowa State University[2]	155,982	148,459	132,580	134,657	116,270	103,241	86,726	78,351
44 U of Tennessee System	153,340	143,662	131,240	128,418	116,644	113,187	104,179	91,417
45 VA Polytech Inst & St U	148,313	135,771	130,994	125,256	121,423	104,266	89,955	80,552
46 U of Alabama Birmingham	141,735	133,790	117,844	113,317	110,603	100,666	85,030	72,692
47 SUNY Buffalo	141,092	128,203	128,428	113,441	109,190	100,291	87,635	70,474
48 New York University	139,202	129,774	122,399	112,106	108,511	104,451	100,872	98,924
49 University of Connecticut	136,740	133,054	124,010	123,794	117,932	109,328	89,630	81,575
50 Indiana University	136,617	127,877	117,565	102,461	89,191	81,793	73,526	65,341
Total, 1st 50 insts.	12,052,571	11,444,237	10,905,982	10,296,451	9,593,203	8,870,179	7,981,765	7,258,565

See explanatory information and SOURCE at end of table.

Table B-32. Total R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
51 Emory University	136,343	120,125	101,398	91,940	82,774	64,713	60,896	58,889
52 Case Western Reserve U	133,272	124,691	118,391	104,199	93,384	86,168	77,303	70,850
53 University of Virginia	131,350	118,019	110,103	96,733	96,815	81,281	74,572	63,861
54 California Inst of Tech[2]	127,946	115,439	111,733	115,526	105,730	98,731	92,530	86,565
55 Carnegie Mellon U[2]	122,580	118,261	110,571	103,030	100,201	101,635	94,051	83,763
56 U TX MD Anderson Cncr	122,357	127,475	112,121	108,988	91,283	85,903	75,642	65,417
57 University of Chicago[2]	121,902	111,877	118,123	113,289	117,955	109,429	98,541	91,879
58 University of Miami	121,475	120,875	104,165	96,979	94,344	90,298	70,783	65,158
59 U of Missouri Columbia	121,256	106,193	97,242	96,748	88,181	74,055	66,365	61,212
60 Oregon State University	119,772	114,004	107,573	96,199	90,688	91,355	88,953	82,786
Total, 1st 60 insts	13,310,824	12,621,196	11,997,402	11,320,082	10,554,558	9,753,747	8,781,401	7,988,945
61 U TX SW Med Ctr Dallas	118,398	114,258	102,263	94,511	85,919	79,920	70,392	62,907
62 University of IL Chicago	113,741	106,952	102,267	90,520	85,268	83,329	75,922	64,701
63 SUNY Stony Brook	113,251	107,817	98,906	90,790	82,236	79,455	79,410	54,850
64 Colorado State University	112,457	115,385	107,339	80,474	73,967	64,351	59,369	52,619
65 U MD Baltimore Prof Sch	110,866	111,772	100,312	100,163	83,689	75,854	68,787	57,931
66 Vanderbilt University	110,105	96,181	95,447	80,759	75,062	65,218	60,591	43,589
67 University of Kentucky	105,539	102,911	92,244	81,137	74,959	69,532	69,003	55,042
68 U CA Irvine	104,778	100,631	89,275	82,523	78,074	66,806	60,100	51,691
69 University of Utah	103,771	105,263	108,486	94,621	89,018	83,340	75,789	68,194
70 U of Nebraska Lincoln	102,746	94,959	91,427	87,529	77,598	68,281	60,788	56,066
Total, 1st 70 insts	14,406,476	13,677,325	12,985,368	12,203,109	11,360,348	10,489,833	9,461,552	8,556,535
71 Princeton University[2]	99,287	95,561	93,958	92,002	91,514	82,914	76,891	65,089
72 University of Oklahoma	95,747	92,019	92,146	79,777	58,645	53,956	50,047	45,350
73 University of Kansas	95,701	85,134	75,004	65,982	61,144	57,111	51,723	50,603
74 Wayne State University	94,632	85,627	81,127	69,997	62,455	59,521	50,509	39,335
75 Washington State U	94,166	92,434	85,080	75,244	66,856	55,173	51,319	48,865
76 University of Cincinnati	93,599	92,512	90,279	80,598	74,461	69,831	60,479	53,804
77 Yeshiva University	92,881	89,636	87,196	86,721	83,968	74,496	75,383	73,773
78 Boston University	90,504	91,158	83,701	74,881	73,651	66,325	61,505	58,299
79 University of New Mexico	90,315	76,736	72,863	67,344	57,728	52,970	47,729e	49,764e
80 U Med & Dent NJ	86,866	76,410	84,505	80,787	71,789	54,451	42,027	32,222
Total, 1st 80 insts	15,340,174	14,554,552	13,831,227	12,976,442	12,062,559	11,116,581	10,029,164	9,073,639
81 U of South Florida	86,186	75,322	68,713	72,948	76,404	60,973	40,396	38,633
82 CUNY Mt Sinai Sch Med	86,179	75,337	75,561	66,310	63,752	56,856	49,727	46,137
83 Tulane University	83,885	75,634	72,190	71,781	56,407	45,195	42,619	38,393
84 Utah State University	83,758	77,263	89,776	94,167	86,450	69,944	59,273	41,343
85 U TX Hlth Sci Ctr San Ant	83,535	75,239	65,179	51,768	45,663	42,501	39,673	34,476
86 Georgetown University	82,661	73,785	64,937	60,454	50,867	53,597	44,783	35,981
87 Woods Hole Oceanograph	81,345	81,519	82,845	76,979e	71,747	74,881	58,700	48,061
88 New Mexico State U	80,286	85,974	83,900	78,736	71,288	60,930	61,001	58,672
89 Virginia Commonwealth U	76,597	77,097	69,189	65,608	62,730	52,193	42,951	42,329
90 Florida State University	76,588	62,929	50,178	53,811	62,933	55,245	50,679	46,420
Total, 1st 90 insts	16,161,194	15,314,651	14,553,695	13,669,004	12,710,800	11,688,896	10,518,966	9,504,084
91 Clemson University	76,572	78,569	77,579	70,236	66,664	56,699	49,375	46,495
92 Mississippi State U	76,201	70,300	65,754	64,335	58,492	53,670	45,005	40,405
93 U of Alaska Fairbanks	76,093	66,796	67,881	67,432	65,571	56,701	49,856e	47,432e
94 Auburn University	75,738	68,151	66,773	69,913	66,795	53,814	52,737	48,045
95 Rockefeller University	74,458	74,396	75,102	74,090	75,245	73,945	68,588	66,760
96 U of South Carolina	74,001	57,062	54,360	55,091	47,477	40,421	31,836	29,658
97 Tufts University	73,749	68,519e	60,891e	47,748	47,009	50,424	54,225	46,497
98 U CA Santa Barbara	73,619	68,775	66,007	59,593	59,750	50,067	46,598	42,704
99 U TX Med Br Galveston	72,773	67,998	57,672	45,086	40,610	38,717	33,047	24,351
100 Oklahoma State University	70,808	72,920	71,238	67,492	65,685	53,655	56,636	47,420
Total, 1st 100 insts	16,905,206	16,008,137	15,216,952	14,290,020	13,304,098	12,217,009	11,006,869	9,943,851

See explanatory information and SOURCE at end of table.

Table B-32. Total R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
101 University Hawaii Manoa	70,079	73,961	80,258	78,166	76,525	70,733	64,278	57,345
102 U TX Hlth Sci Ctr Houston	66,432	58,786	55,262	53,896	45,707	46,860	43,345	35,158
103 Kansas State University	65,696	62,562	57,723	53,010	50,311	47,302	43,174	40,587
104 U MA Amherst	65,344	64,111	62,990	--	--	--	--	--
105 Oregon Health Sciences U	63,875	56,860	49,313	41,661	41,420	35,097	29,509	26,062
106 Arizona State University	62,563	66,142	69,346	63,489	59,849	44,347	39,510	38,763
107 U MA Worcester	61,790	60,602	53,342	--	--	--	--	--
108 U CA Riverside	60,995	59,065	57,536	57,244	54,892	53,213	52,983	51,158
109 SUNY Albany	59,122	37,860	35,856	20,580	22,034	24,240	19,625	18,815
110 West Virginia University	58,604	54,271	52,482	49,686	46,624	37,569	28,807	25,676
Total, 1st 110 insts	17,539,706	16,602,357	15,791,060	14,707,752	13,701,460	12,576,370	11,328,100	10,237,415
111 Dartmouth College	57,845	59,920	53,668	49,384	43,737	38,452	35,563	31,227
112 U Arkansas Main	57,815	58,325	44,768	40,831	36,963	32,842	28,104	27,435
113 Thomas Jefferson U	56,932	51,106	41,329	33,066	30,969	29,405	24,231	20,357
114 Temple University	56,308	53,686	53,921	54,921	49,449	45,482	40,941	36,013
115 Brown University	55,146	57,152	55,585	49,503	46,763	43,564	41,556	38,110
116 Wake Forest University	52,581	57,646	49,919	44,214	39,654	37,156	30,568	23,596
117 University of Vermont	51,775	49,839	49,542	46,541	45,162	42,743	36,815	31,547
118 University of Delaware	50,734	52,627	48,970	44,696	40,119	37,194	32,023	31,681
119 Medical Col of Wisconsin	49,604	48,689	43,579	40,446	34,622	34,951	33,231	30,218
120 University of Idaho	49,338	44,655	44,140	39,407	34,936	31,879	30,078	24,070
Total, 1st 120 insts	18,077,784	17,136,002	16,276,481	15,150,761	14,103,834	12,950,038	11,661,210	10,531,669
121 University of Dayton	47,768	45,052	41,009	37,925	36,177	31,984	31,483	30,105
122 U of Rhode Island	46,631	45,942	40,842e	38,842	35,846	36,219e	35,940	27,369
123 Med U of South Carolina	46,249	42,543	31,900	25,877	23,128	23,017	20,949	19,658
124 U of New Hampshire	43,707	39,555	33,744	29,591	25,994	23,720	22,095	19,701
125 University of Houston	43,131	55,038	44,957	42,292	37,978	34,229	26,803	24,378
126 U CA Santa Cruz	42,457	37,886	36,413	31,620	26,347	23,651	22,163	22,222
127 U of Nevada Reno	42,176	38,564	37,546	29,303	21,449	18,141	17,867	15,171
128 U of Central Florida	41,362	33,922	27,629	41,935	30,618	30,991	11,307	9,571
129 Rush University	39,736	34,039	26,184	27,359	21,284	21,741	19,827	16,342
130 Texas Tech University	39,455	38,119	36,869	34,994	34,124	33,926	29,374	28,390
Total, 1st 130 insts	18,510,456	17,546,662	16,633,574	15,490,499	14,396,779	13,227,657	11,899,018	10,744,576
131 Syracuse University	38,650	32,443	32,145	30,606	33,811	35,543	33,643	30,348
132 George Washington U	38,429	41,177	39,335	29,791	32,372	30,284	23,522	24,320
133 Rensselaer Polytech Inst	37,191	44,132	50,769	50,106	46,880	38,805	36,511	25,176
134 North Dakota State U	36,977	34,971	34,466	31,935	12,468	10,433	8,638	19,508
135 Loyola U of Chicago	36,830	29,232	30,099	22,702	12,260	11,303	8,327	7,123
136 Montana State University	36,149	32,911	34,419	30,278	27,648	25,968	25,227	23,093
137 Brandeis University	34,835	36,213	35,229	33,837	30,881	30,596	26,618	23,811
138 U of NE Med Ctr Omaha	33,997	31,669	31,564	27,858	17,844	17,291	14,684	12,492
139 University of Wyoming	33,820	32,556	30,181	23,009	22,831	23,310	20,429	17,316
140 Rice University	33,309	30,403	29,424	30,577	26,267	21,563	18,851	17,298
Total, 1st 140 insts	18,870,643	17,892,369	16,981,205	15,801,198	14,660,041	13,472,753	12,115,468	10,945,061
141 U of Alabama Huntsville	31,482	34,153	32,017	28,897	29,565	26,186	18,628	11,158
142 University of Oregon	31,170	30,738	30,242	26,151	26,346	22,476	18,567	16,815
143 Sthrn IL U Carbondale	30,497	26,376	28,094	28,340	25,873	23,357	20,310	18,654
144 The Medical Col of PA	30,473	24,996	25,835	24,645	18,643	20,542	15,277	11,081
145 NJ Inst of Technology	29,983	23,781	21,126	16,463	15,225	11,402	8,327	10,418
146 U of Maine	29,393	24,879	23,213	27,082	23,605	19,974	17,341	16,952
147 San Diego St University	29,309	32,493	30,683	28,570	22,524	20,124	19,370	16,973
148 Lehigh University	29,188	30,869	31,822	27,912	27,255	26,004	27,089	24,893
149 Medical Col of Georgia	28,020	24,935	21,426	12,082	12,052	11,363	9,925	10,053
150 SUNY Hlth Sci Ctr Brklyn	27,773	27,645	24,171	32,824	22,873	20,523	18,374	17,008
Total, 1st 150 insts	19,167,931	18,173,234	17,249,834	16,054,164	14,884,002	13,674,704	12,288,676	11,099,066

See explanatory information and SOURCE at end of table.

Table B-32. Total R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
151 Unif Svcs U of Hlth Sci	27,334	30,846	27,875 i	24,904 i	21,933 i	18,962 i	15,991	12,076
152 US Naval Postgrad School	26,538	24,296	20,412	19,397	17,391	15,306	15,515	13,053
153 U Mississippi, All Camp	25,000	23,734	23,361	24,748	22,071	17,092	15,125	13,377
154 Florida A&M University	24,691	22,777	22,230	18,552	15,847	14,171	12,079	9,364
155 U PR Mayaguez	22,967	23,156	25,238	27,897 i	30,555	29,343	27,091	24,491
156 University of Notre Dame	22,833	23,745	22,679	21,302	19,373	19,385	17,845	14,409
157 U Arkansas Medical Sci	22,762	15,686	15,889	14,250	11,898	10,834	9,851	8,094
158 The University of Alabama	21,960	23,149	22,573	21,248	21,488	18,395	15,836	13,362
159 SUNY Col Env Sci Frstry	21,839	21,856	18,456	19,049	18,671	17,221	12,917	11,690
160 Michigan Tech University	21,786	18,696	18,179	19,667	16,037	15,186	14,321	12,656
Total, 1st 160 insts.	19,405,641	18,401,175	17,466,726	16,265,178	15,079,266	13,850,599	12,445,247	11,231,638
161 Desert Research Institute	21,459	21,187	20,579	17,948	16,852	16,005	14,798	12,899
162 Wright State University	21,055	20,589	17,401	14,646	13,451	11,043	9,551	7,260
163 NM Inst Mining & Tech	20,945	24,040	25,208	24,059 i	22,911	22,289	20,357	23,709
164 Drexel University	20,886	20,314	23,184	19,705	20,079	17,983	16,045	15,803
165 Oregon Grad Inst Sci Tech	20,859	18,288	12,332	11,160	9,262	8,825	8,470	6,926
166 St Louis University	20,844	20,826	19,932	19,183	17,157	14,251	9,700	9,190 i
167 University of Louisville	20,475	19,496	17,400	16,852	15,921	14,466	22,945	22,966
168 Col of William & Mary	20,443	21,793	18,890	18,508	17,792	15,394	8,031	6,694
169 Howard University	19,836	18,427	17,576	15,731	17,382	17,125 i	16,870 i	16,615
170 U MD Center for EES	19,817	19,055	18,557	16,205	15,652	13,741	12,682	12,029
Total, 1st 170 insts.	19,612,260	18,605,190	17,657,785	16,439,175	15,245,725	14,001,721	12,584,696	11,365,729
171 U of Missouri Rolla	19,706	18,025	15,619	14,432	14,285	17,692	18,823	14,712
172 U WI Milwaukee	19,180	18,245	18,567	16,865	15,639	13,428	12,424	11,079
173 Northeastern University	19,104	18,517	15,876	15,973	14,347	13,302	11,894	10,124
174 U of Nevada Las Vegas	19,031	19,373	13,300	19,491	15,449 i	11,409 i	7,369	6,184 i
175 George Mason University	18,871	15,830	11,930	9,726	8,011	4,220	3,834	2,368e
176 CUNY City College	18,831	20,401	16,454	15,451	12,973	11,724	10,392	9,079
177 University North Dakota	18,732	19,204	18,265	16,995	17,498	17,518	15,806	16,404
178 New York Medical College	18,725	18,491	16,799	14,633	13,244	12,958	13,817	11,794
179 Med Col Hampton Roads	17,873	15,818	11,238	11,112	10,496	8,125	6,614	4,320
180 U PR Med Sci Campus	17,765	14,622	18,296	11,014	6,293	6,528	5,517	6,893
Total, 1st 180 insts.	19,800,078	18,783,716	17,814,129	16,584,867	15,373,960	14,118,625	12,691,186	11,458,686
181 U TX Arlington	17,453	14,834	13,896	12,887	5,729	7,064	7,670	5,760
182 Georgia State University	17,100	12,133	10,026	9,271	8,942	7,000	5,843	5,258
183 University of Montana	16,908	15,169	10,177	7,871	7,332	6,482	6,842	6,332
184 University of Akron	16,783	17,558	14,825	13,405	10,372	9,728	7,114	7,190
185 Ohio University	16,425	15,452	14,811	12,796	12,982	11,461	10,863	8,548
186 SUNY Binghamton	15,803	13,760	12,843	9,870	10,680	9,270	8,926	8,541
187 U MA Lowell	15,155	14,292	14,880	12,403	11,291	11,242	10,903	8,364
188 Old Dominion University	14,911	14,097	10,859	10,040	10,478	9,107	7,252	6,572
189 U MD Biotechnology Inst	14,839	--	--	--	--	--	--	
190 Med Col PA Hahnemann U	14,745	17,756	18,203	13,169	13,595	11,158	8,551	9,062
Total, 1st 190 insts.	19,960,200	18,918,767	17,934,649	16,686,579	15,465,361	14,201,137	12,765,150	11,524,313
191 U TX Dallas	14,492	13,371	12,995	10,571	12,075	11,265	10,936	10,677
192 Mercer University	14,201	13,771	10,354	8,172	4,656	3,043	931	620
193 South Dakota State U	14,083	14,050	12,692	11,511	9,511	8,472	8,622	8,279
194 U of South Alabama	13,917	12,650	12,277	12,924	11,105	10,503	8,578	7,668
195 Colorado School of Mines	13,880	13,644	12,783	12,971	10,943	9,364	8,832	8,515
196 Brigham Young University	13,859	13,587	14,469	12,682	11,608	11,544	10,967	11,341
197 Western Illinois U	13,780	14,448	11,800 i	9,155 i	6,510 i	3,865 i	1,220	1,135 i
198 NC A&T State University	13,637	12,090	11,914	10,427	8,657	6,706	6,401	4,461
199 Florida International U	13,520	11,443	--	--	--	--	--	
200 Stevens Inst of Tech	13,460	14,004	14,580	8,303	6,146	4,973	6,426	8,915
Total, 1st 200 insts.	20,099,029	19,051,825	18,048,513	16,783,295	15,546,572	14,270,872	12,828,063	11,585,924

See explanatory information and SOURCE at end of table.

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Table B-32. Total R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
201 Memphis State University	13,305	11,740	12,169	12,000	12,073	9,892	8,201	7,132
202 Clark Atlanta University	12,709	12,057	11,483	8,655	7,896i	7,137i	6,378i	5,619i
203 Med Col of Ohio Toledo	12,471	12,285	10,905	9,353	7,159	6,809	5,495	7,652
204 CUNY Hunter College	12,264	10,381	8,939	8,075	6,928	6,526	6,437	6,943
205 U TX El Paso	12,062	12,480	10,147	9,447	6,889	4,168	2,641	2,605
206 Polytechnic University	11,869	9,424	9,273	9,272	10,919	11,345	9,378	9,400
207 SUNY Hlth Sci Ctr Syrcse	11,751	12,453	12,992	14,564	14,401	31,125	24,541	21,186
208 Worcester Polytech Inst	11,602	11,484	8,925	5,889	4,683	4,208	3,814	3,562
209 Rochester Inst of Tech	11,528	6,331	5,343i	4,357i	3,371i	2,385i	1,399	1,149i
210 Northern Illinois U	11,445	11,215	10,708	10,074	8,930	7,304	5,905	4,899
Total, 1st 210 insts.	20,220,035	19,161,675	18,149,397	16,874,981	15,629,821	14,361,771	12,902,252	11,656,071
211 U of Missouri Kansas City	11,420	10,976	9,889	8,300	8,310	7,926	7,630	4,790
212 Kent State University	11,312	12,075	11,655	8,469	7,172	5,534	5,086	4,573
213 Florida Atlantic U	11,236	11,331	8,021	5,600	4,985	3,469	3,045	2,665
214 U of Southwestern LA	11,099	11,319	10,815	10,232	8,319	6,817	5,092	5,017
215 Alabama A&M University	11,098	9,316	7,053	6,699	7,010	6,272	6,140	4,534
216 U MA Boston	10,962	9,745	7,974	--	--	--	--	--
217 Boston College	10,724	10,731	10,400	9,810	8,052	6,152	6,137	5,099
218 Cleveland State U	10,570	9,803	10,939	10,205	8,699	7,570	7,334	6,897
219 Clarkson University	10,412	10,586	9,518	9,125	8,392	7,523	7,804	7,442
220 Meharry Medical College	10,336	9,283	7,258	7,249	6,663	6,564	5,228	4,797
Total, 1st 220 insts.	20,329,204	19,266,840	18,242,919	16,950,670	15,697,423	14,419,598	12,955,748	11,701,885
221 Albany Medical College	10,324	11,845	9,681	10,131	9,431	9,827	11,694	13,287
222 Northern Arizona U	10,290	9,051	8,388	6,913	5,902	5,368	4,204	3,774
223 University of North Texas	10,110	9,026	10,701	10,580	9,741	9,121	7,038	5,724
224 Creighton University	9,645	9,109	8,047	8,324	8,929	7,934	7,650	5,910i
225 Tennessee Tech U	9,357	9,478	9,872	9,888	9,631	7,539	7,483	6,970
226 C R Drew U of Med & Sci	9,347	6,852	7,862	7,043	4,970i	2,898	2,826	2,913
227 Loma Linda University	9,204	9,030	8,028	6,191	7,547	5,248	6,496	7,469
228 Western Michigan U	9,145	8,630	6,199	6,011	4,257	3,103i	1,949	1,267
229 Inst Paper Sci and Tech	8,995	8,344	7,474	7,887	5,761	6,231	5,782	5,777
230 Illinois Inst of Tech	8,853	8,252	6,293	7,128	6,793	6,864	7,545	8,470
Total, 1st 230 insts.	20,424,474	19,356,457	18,325,464	17,030,766	15,770,385	14,483,731	13,018,415	11,763,446
231 U Southern Mississippi	8,413	7,334	5,375	7,388	4,666	4,413	3,517	3,840
232 Prairie View A&M U	8,306	5,931	6,098	3,623	3,521	3,680	1,741e	1,498
233 Southern Methodist U	8,277	7,037	7,722	8,607	13,600e	9,363	6,814	4,938
234 East Carolina University	8,245	7,360	6,067	6,119	6,098	5,241	4,679	3,771
235 U MD Baltimore County	8,117	7,544	7,619	6,809	5,385	4,342	3,975	3,222
236 University of Toledo	8,043	8,441	7,287	6,743	5,551	4,599	3,843	2,950i
237 University of Tulsa	7,945	7,889	5,961	5,318	4,325	3,329	3,333	2,852i
238 Catholic U of America	7,542	7,926	7,346	7,365	7,398	6,554	5,759	5,268
239 Morehouse School of Med	7,522	7,448	7,106	6,291	5,891	4,320	2,222	0i
240 Wichita State University	7,483	6,407	6,285	5,182	3,196	3,443	4,758	2,741
Total, 1st 240 insts.	20,504,367	19,429,774	18,392,330	17,094,211	15,830,016	14,533,015	13,059,056	11,794,526
241 Portland State University	7,146	5,860	4,433	4,169	3,834	3,374	2,810	2,737
242 Tuskegee University	7,121	5,500	4,800	4,426	5,089	5,348	3,752	2,752
243 Air Force Inst of Tech	7,057	3,252	3,813	2,243	2,200	1,800i	1,400	456
244 Finch U Hlth Sci Chicago	7,057	6,928	5,899	4,908	4,695	4,535	4,369	3,866
245 CUNY Col Staten Island	7,045	1,209	1,236	1,140	1,351	1,171	867	788i
246 Tennessee State U	6,916	5,252	4,475	3,709	3,300	3,442	3,408	2,719
247 Miami University (OH)	6,731	4,919	3,972	3,087	2,203	2,364	2,194i	2,024i
248 University of Denver	6,671	8,595	8,284	6,484	10,102	8,938	10,038	12,239
249 U of Missouri St Louis	6,664	4,681	4,304	2,468	2,291	2,439	2,218	1,824
250 Southern U A&M All Camp	6,512	6,837	6,813	5,942	5,278i	4,615	3,451	2,196
Total, 1st 250 insts.	20,573,287	19,482,807	18,440,359	17,132,787	15,870,359	14,571,041	13,093,563	11,826,127

See explanatory information and SOURCE at end of table.

Table B-32. Total R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
251 Oakland University	6,285	6,096	5,804	5,912	4,102	4,673	3,132	4,500
252 Idaho State University	6,052	4,119	2,756	2,030	1,634	1,312	711	709
253 U North TX Health Sci Ctr	5,475	5,718	3,920	3,504	2,767	3,630	4,461	3,560
254 U PR Rio Piedras	5,434	5,502	4,518	5,058	5,374	4,017	4,741	4,175
255 Hampton University	5,342	4,597	3,272	3,345	2,307	2,168	--	--
256 Marquette University	5,322	4,896	4,256	3,821	3,262	2,454	2,411	1,621
257 South Carolina State Col	5,181	4,103	3,665	2,526	2,593	1,694 i	796	878 i
258 Wesleyan University	5,112	4,804	4,095	3,248	4,021	3,943	3,140	3,397
259 Illinois State University	5,071	4,535	3,294	2,898	2,951	2,559	2,578	2,296
260 CA St U Long Beach	4,756 i	4,507 i	4,507 i	4,507 i	4,507 i	4,507 i	4,507	3,822 i
Total, 1st 260 insts.	20,627,317	19,531,684	18,480,446	17,169,636	15,903,877	14,601,998	13,120,040	11,851,085
261 SD Sch of Mines & Tech	4,718	4,150	3,693	2,850	3,000	2,596	2,418	1,916
262 Alfred University	4,712	4,479	4,117	3,911	4,067	3,874	3,829	2,591
263 Jackson State University	4,697	4,371	4,065	3,912	3,762	3,747	3,403	2,260
264 Virginia State University	4,569	4,801	6,075	5,795	3,258	2,620	2,476	2,356 i
265 Florida Inst of Tech	4,384	5,866	5,924	6,305	7,003	3,531	2,505	1,918
266 New Sch for Soci Res	4,383	1,559	1,572	1,164	1,026	1,000	1,282	585
267 Xavier University of LA	4,176	3,169	2,379	2,424	1,902	1,294	--	--
268 Delaware State University	3,987	1,262	1,387	1,330	1,027	1,027	--	--
269 U TX San Antonio	3,982	3,286	--	--	--	--	--	--
270 Bowling Green State U	3,874	3,430	3,430	3,729	3,400	3,353	3,142	2,439
Total, 1st 270 insts.	20,670,799	19,568,057	18,513,088	17,201,056	15,932,322	14,625,040	13,139,095	11,865,150
271 Albany State College	3,687e	3,733	2,339	1,172	1,173	1,725	366	263
272 Morgan State University	3,558	1,496	1,223	701	657	649	742e	635
273 U Arkansas Pine Bluff	3,446	3,247	2,372	2,419	1,188	1,148	1,199	1,047
274 American University	3,226	3,903	4,330	5,057	4,127	3,765	3,917	3,286
275 University of DC	3,211	3,055 i	2,900	2,865	2,569	2,271 i	1,973	1,485
276 U MA Dartmouth	3,134	2,340	1,941	--	--	--	--	--
277 Lincoln University	3,121	2,958	3,194	3,027	2,771	2,901	--	--
278 Texas Christian U	3,110	3,170	3,128	2,859	1,823	888	737	912
279 Ponce School of Medicine	3,102	2,591	1,715	1,372	943	856	663	657
280 Alcorn State University	3,099	3,129	2,517	2,041	1,935	1,850	1,692e	1,623 i
Total, 1st 280 insts.	20,703,493	19,597,679	18,538,747	17,222,569	15,949,508	14,641,093	13,150,384	11,875,058
281 Seton Hall University	3,072	2,895 i	2,728 i	2,561 i	2,394 i	2,227 i	2,060 i	1,893 i
282 Lamar University	3,052	3,269	2,964	2,898	2,121	779	202	417
283 U of South Dakota	2,879	3,996	1,851	1,598	1,831	1,381	1,287	1,200 i
284 Stephen F Austin St U	2,820	1,771	1,490	1,178	1,390	1,417	791	863
285 U of the Virgin Islands	2,794	6,189	5,753 i	5,318 i	4,883e	4,734	4,666	2,386e
286 Tarleton State University	2,760	2,839	1,396	998	309	38	44	44
287 Clark University	2,711	2,311	1,694	1,314	1,281	1,256	1,111	1,058
288 CUNY Queens College	2,705	2,649	2,328	2,518	2,551	2,301	2,204	2,086 i
289 CUNY Grad Sch & U Ctr	2,674	3,125	3,185	2,554	3,858	3,069	2,189	2,336
290 Kentucky State University	2,665	2,349	2,525	2,026	2,856	1,721	1,697	1,856
Total, 1st 290 insts.	20,731,625	19,629,072	18,564,661	17,245,532	15,972,982	14,660,016	13,166,635	11,889,197
291 Fort Valley State College	2,648	2,749	2,711	2,370	2,313	2,173	--	--
292 Texas Southern U	2,612	4,220	2,329	2,101	1,546	1,519	1,703	1,491 i
293 Bryn Mawr College	2,559	2,310	1,746	2,190	1,854	895	817	807
294 U of Detroit Mercy	2,527	2,069	1,731	1,450	1,526	1,282	805	798 i
295 Boise State University	2,453	1,630	--	--	--	--	--	--
296 N.E. Ohio Univs Col Med	2,446	1,892	1,747	1,408	1,409	1,616	1,956	1,349
297 Sam Houston State U	2,321	1,380	1,072	1,238	380	219	206	320
298 Louisiana Tech University	2,315	3,582	3,985	2,759	3,894	3,930	2,828	2,775
299 U of NC Greensboro	2,309	2,360	2,128	1,989	1,154	823	455	495
300 Institute of Textile Tech	2,297	2,412	2,281	2,148	1,921	1,311	1,678	1,238
Total, 1st 300 insts.	20,756,112	19,653,676	18,584,391	17,263,485	15,988,979	14,673,784	13,177,083	11,898,470

See explanatory information and SOURCE at end of table.

Table B-32. Total R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
301 East Tennessee State U	2,283	1,927	1,750	1,740	1,902	1,629	1,163	1,258
302 Fordham University	2,241	1,737	1,936	1,816	2,501	2,648	2,386	2,190
303 CA St U Chico	2,158	2,158	1,826i	1,494i	1,162i	830i	498	976
304 U Ctrl Del Caribe Esc Med	2,139	1,977	1,294	852	620	682	540	577
305 Northeast Louisiana U	2,128	2,644	2,401	904	1,138	439	386	308
306 Johnson C Smith U	2,083	377	276	475	477	480	--	--
307 Langston University	2,046	1,881	1,750	1,310	1,200	2,349	--	--
308 Ball State University	2,002	1,322	1,211	1,241	850	798	696	664
309 Hampshire College	1,978	1,447	--	--	--	--	--	--
310 Midwestern University	1,928	1,482	1,097	1,372	1,161	1,651	2,252	1,772
Total, 1st 310 insts.	20,777,098	19,670,628	18,597,932	17,274,689	15,999,990	14,685,290	13,185,004	11,906,215
311 Smith College	1,920	1,788i	1,658i	1,528i	1,398	1,774	1,264	1,265i
312 Villanova University	1,848	1,670	1,560	1,461	1,390	1,440	696	755
313 Santa Clara University	1,815e	1,815	2,103	1,579	1,569	1,396	1,355	1,094
314 Central State University	1,791	1,889	1,691	1,640	3,976	673	--	--
315 Hofstra University	1,786	1,073	211	493	515	366	165	258
316 CUNY Brooklyn College	1,783	2,181	2,311i	2,437i	2,563i	2,689i	2,815	2,634i
317 Wellesley College	1,747	1,731i	1,718i	1,705i	1,692i	1,679i	1,666e	1,360
318 U WI Superior	1,705	1,988	1,881	1,707	1,704	1,745	1,553	1,659
319 U WI Stevens Point	1,649	1,179	827	498	449	432	362	380i
320 Fisk University	1,631	1,502	1,317	641	1,156	1,157	1,741	862
Total, 1st 320 insts.	20,794,773	19,687,444	18,613,209	17,288,378	16,016,402	14,698,641	13,196,621	11,916,482
321 Loyola College	1,569	1,158	--	--	--	--	--	--
322 Wentworth Inst of Tech	1,504	1,634	1,287	1,460	1,435	1,383	1,457	1,431i
323 Tougaloo College	1,502	1,415	1,302	1,262	1,028	1,191	--	--
324 U WI Stout	1,500	1,433	2,019	2,282	755	635	464	379i
325 New Mexico Highlands U	1,485	291	253i	216i	179i	142i	105	478i
326 Texas Woman's University	1,458	1,380	1,394	1,359	1,336	969	825	709
327 CUNY H H Lehman Col	1,454	0e	--	--	--	--	--	--
328 U of Northern Iowa	1,404	1,079	687	559	357	156	95	78i
329 Swarthmore College	1,401	1,128	1,102i	1,078i	1,054i	1,030i	1,006	822i
330 Central Michigan U	1,334	1,733	1,715	1,066	1,071	866	1,025	1,164
Total, 1st 330 insts.	20,809,384	19,698,695	18,622,968	17,297,660	16,023,617	14,705,013	13,201,598	11,921,543
331 De Paul University	1,329	1,510	914	786	972	905	576	617
332 Barnard College	1,306	1,440	1,150	758	653	717	677	670i
333 CA Sch Prof Psy Fresno	1,279	616	875	661	1,382	1,922	1,015	535
334 U of Southern Colorado	1,251	1,228	--	--	--	--	--	--
335 Chicago State University	1,248	1,048	943i	842i	741i	640i	539	506i
336 Nova University	1,245	1,120	1,323	1,667	1,601	1,108	962	873
337 Baylor Col of Dentistry	1,244	754	745	824	849	788	692	598
338 Claremont Graduate Sch	1,229	1,011	639	571	583	746	1,353	1,367
339 SUNY Col Oswego	1,192	1,001	792	350	160	467	341	334
340 Baylor University	1,179	1,275	1,469	1,067	1,143	1,841	934	931
Total, 1st 340 insts.	20,821,886	19,709,698	18,631,818	17,305,186	16,031,701	14,714,147	13,208,687	11,927,974
341 U MD Eastern Shore	1,128	3,045	3,640	1,620	1,850	2,944	1,736	1,522
342 Duquesne University	1,115	589	340	572	558	357	357	357
343 West Chester U of PA	1,113	710	628i	546i	464i	382i	300	240i
344 SUNY Col Plattsburgh	1,108	846	1,022	1,217	1,254	1,030	1,164	922
345 St John's University (NY)	1,103	860	1,069	593	759	632	814	769i
346 Spelman College	1,089	603	547	444	505	399	--	--
347 Benedict College	1,062	600	702	0	0	0	--	--
348 University of Richmond	1,061	652	--	--	--	--	--	--
349 Alabama State University	1,055	534	614	448	423	456	--	--
350 Union College (NY)	1,054	1,032	1,415	1,254i	1,098i	942i	786i	630i
Total, 1st 350 insts.	20,832,774	19,719,169	18,641,795	17,311,880	16,038,612	14,721,289	13,213,844	11,932,414

See explanatory information and SOURCE at end of table.

Table B-32. Total R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
351 Indiana State University	1,042	835	1,267	1,179	903	967	949	541
352 Morris Brown College	1,010	1,227	1,341e	887	647e	164	—	—
353 The Union Institute	1,008	0	0	0	0	0	0	0
354 Morehouse College	992	1,119	1,223	926	868	1,093	—	—
355 Murray State University	976	1,026	892i	759i	626i	493i	360	524i
356 SUNY Col Buffalo	966	1,496	1,430	1,240	832	863i	893i	923i
357 Winston Salem State U	940	529	583	617	532	650	—	—
358 Bowie State University	937	465	425	234	35	0	—	—
359 Haverford College	920	914i	913i	912i	911i	910i	909	806i
360 CUNY York College	840	930	877	850	816	826	723	659
Total, 1st 360 insts	20,842,405	19,727,710	18,650,746	17,319,484	16,044,782	14,727,255	13,217,678	11,935,867
361 Kirksville Col Osteo Med	836	829	856	624	539	727	791i	855
362 Northeast Missouri St U	743e	743	720	1,118	1,522	1,605	772	402
363 Selma University	740	420	798	650	790	816	—	—
364 U of Missouri Sys Admn	740	915	2,969	3,561	2,991	9,500	8,734	9,512
365 Grand Valley State U	736	830	730	611	570	465	576	484i
366 Monmouth College (NJ)	722	404e	184e	175	96	100	0	0i
367 U of Health Sci (MO)	718	75	105	0	0	0	58	83
368 U WI La Crosse	712	708	875	862	795	531	309	347
369 SUNY Col of Optometry	680	377	329	231	483	494	375	518
370 Norfolk State University	671	566	793	752	826	652	425	304
Total, 1st 370 insts	20,849,703	19,733,577	18,659,105	17,328,068	16,053,394	14,742,145	13,229,718	11,948,372
371 U WI Eau Claire	666	387	350	292	430	544	369	324i
372 Pitzer College	665	290	—	—	—	—		
373 Mount Holyoke College	662i	584i	584i	584i	584i	584i	584	479i
374 University of San Diego	641	736	—	—	—	—		
375 Phila Col of Phar & Sci	634	755	907	968	1,153	778	405	342
376 Valparaiso University	556	490i	424i	358i	292i	226i	160	19
377 Marshall University	540	604	663	918	1,270	1,679	1,526	938
378 SUNY Col Geneseo	518	344	327	214	316	188	218	179i
379 Bethune Cookman College	507	221	626	599	554	440		
380 SUNY Col Old Westbury	505	440	—	—	—	—		
Total, 1st 380 insts	20,855,597	19,738,428	18,662,986	17,332,001	16,057,993	14,746,584	13,232,980	11,950,653
381 Wilberforce University	505	200	—	—	—	—		
382 University of New Haven	504	244	—	—	—	—		
383 Lincoln University (PA)	502	505	1,090	510	845	768e	867	648i
384 Appalachian State U	494	358	—	—	—	—		
385 Bowdoin College	482	306	319i	330i	341i	352i	363	398i
386 Phila Col Osteopathic Med	469	1,095	506	423i	340	512	381	344
387 Teachers Col. Columbia U	468	79	401	429	803	581	900	765
388 Fort Lewis College	462	660	—	—	—	—		
389 SUNY Col Brockport	458	373	406	948	833	357	219	205i
390 CA Sch Prof Psy L A	451	427	378	490	1,316	1,551	616	500
Total, 1st 390 insts	20,860,392	19,742,675	18,666,086	17,335,131	16,062,471	14,750,705	13,236,326	11,953,513
391 Ohio Wesleyan University	450	275	—	—	—	—		
392 Fayetteville State U	437	273	187	275	154	360	—	—
393 College of the Holy Cross	431	928	827i	727i	627i	527i	427	397i
394 Elizabeth City State U	418	1,050	341	0	15	26		
395 Southern Col of Optometry	414	414	—	—	—	—		
396 North Carolina Central U	409	335	755	477i	199	555e	571	515i
397 Virginia Military Inst	394	426	376i	328i	280i	232i	184	188i
398 Rust College	389	346	798	289	156	214	—	—
399 CUNY Bernard Baruch Col	383	491	1,459	1,897	1,150	646	194	234i
400 U WI Oshkosh	380	329	310	344	312	217	166	145i
Total, 1st 400 insts	20,864,497	19,747,542	18,671,139	17,339,468	16,065,364	14,753,482	13,237,868	11,954,992

See explanatory information and SOURCE at end of table.

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Table B-32. Total R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
401 Indiana U of PA All Cmp	374	333	--	--	--	--	--	--
402 U WI Parkside	373	487	587	561	798	883	704	659i
403 U Osteo Med & Hlth Sci	362	396	36	163	67	97	108	20
404 U WI Green Bay	350	449	335	329	449	616	376	402i
405 Drew University	348	272	--	--	--	--	--	--
406 New York Inst Technology	346	402	1,297i	2,192i	3,087	3,998	5,678	6,093
407 Kutztown U of PA	345	182	146	55	119	195	360	330i
408 Middle Tennessee State U	327	163	--	--	--	--	--	--
409 Mississippi Valley St U	319	213	71	64	43	14	31	0
410 SUNY Col Fredonia	319	271	283	54	130i	206i	282	277i
Total, 1st 410 insts	20,867,960	19,750,710	18,673,894	17,342,886	16,070,057	14,759,491	13,245,407	11,962,773
411 SUNY Col Cortland	295	173	118	96	254	168	151	127i
412 Northeastern Illinois U	294	197	257	33	118	77	37	52i
413 New England Col Opt	289	333	--	--	--	--	--	--
414 Furman University	283	253	237i	225i	213i	201i	189	68
415 Pittsburg State U	281	303	321i	337i	353i	369i	385	308i
416 Long Island University	267	278	217	170	171	313	572	324
417 Western Carolina U	263	183	--	--	--	--	--	--
418 University of Portland	257	117	305	169	370	462	598	481i
419 SUNY Purchase College	255	206	--	--	--	--	--	--
420 U of Northern Colorado	252	240	271	132	223	182	33	50
Total, 1st 420 insts	20,870,696	19,752,993	18,675,620	17,344,048	16,071,759	14,761,263	13,247,372	11,964,183
421 Andrews University	247	377	278	255	394	200	190e	160i
422 Canisius College	245	1,180	856	337	619	209	309	289i
423 Adelphi University	243e	243	355	405	499i	592	466i	341
424 West Virginia State Col	241	190	179	218	146	81	--	--
425 Towson State University	229	316	279i	244i	209i	174i	139	201
426 MA Col Phar Allied Hlth	222	181	156	215	73	41	90i	137i
427 Pacific Lutheran U	222	107	208	130	577	44	70	75i
428 College of Wooster	220	182	170i	159i	148i	137i	126	129i
429 Jarvis Christian College	219	336	97	60	75	60	--	--
430 Coppin State College	218	77	103	212	1,017	834	--	--
Total, 1st 430 insts	20,873,002	19,756,182	18,678,301	17,346,283	16,075,516	14,763,635	13,248,762	11,965,515
431 East Texas State U	213	206	176	260	279	401	269	429
432 Grambling State U	209	210	277i	343i	409	106	64	136
433 U WI Whitewater	201	204	164	141	78	134	70	60i
434 CUNY Jay Col Crim Just	181	859	--	--	--	--	--	--
435 U WI River Falls	175	404	370	192	122	142	85	73i
436 Col Osteo Med of Pacific	168	39	6	6	9	11	0	0
437 Kennesaw State College	164	121	--	--	--	--	--	--
438 Oakwood College	161	186	206	179	226	0	--	--
439 Bates College	159	152	--	--	--	--	--	
440 Central Missouri St U	159	148	--	--	--	--	--	
Total, 1st 440 insts	20,874,792	19,758,711	18,679,500	17,347,404	16,076,639	14,764,429	13,249,250	11,966,213
441 Philander Smith College	157	157	145	154	120	165	--	--
442 University of Hartford	157	0e	--	--	--	--	--	--
443 Sul Ross State University	143	179	139	156	301	215	155	141i
444 WV Sch of Osteo Med	142	146	112	168	134	120	85	90
445 Fairleigh Dickinson U	140e	140	118	859	3,183	3,356	4,196	3,210
446 SUNY Col Oneonta	129	126e	121e	121	104	77	67	77i
447 Antioch University	128	131	92	0	0	0	0	1i
448 Savannah State College	128	173	195	212	221	179	--	--
449 University of Bridgeport	127	189	--	--	--	--	--	--
450 Bennett College	112	123	914	64	425	364	--	--
Total, 1st 450 insts	20,876,155	19,760,075	18,681,336	17,349,138	16,081,127	14,768,905	13,253,753	11,969,732

See explanatory information and SOURCE at end of table.

Table B-32. Total R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

Page 10 of 11

Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
451 Dillard University	110	0	0	0	0	469	0	0
452 Claflin College	103	180	240	383	205	0e	--	--
453 Goucher College	95	164	71	73	87	78	62	72i
454 Iona College	95	116	--	--	--	--	--	--
455 U WI Platteville	88	73	34	38	23	47	10	13i
456 Knoxville College	85	23e	33i	42i	51i	60	--	--
457 Oral Roberts University	85	140	82	37	60	1,206	2,637	2,519i
458 Loras College	80	72	62i	53i	44i	35i	26	17i
459 Providence College	71	100	80	103	25	18	47	37
460 Wheeling Jesuit College	71	71	--	--	--	--	--	--
Total, 1st 460 insts	20,877,038	19,761,014	18,681,938	17,349,867	16,081,622	14,770,818	13,256,535	11,972,390
461 University of the Pacific	60	1,124	1,020	1,103	897	990	968i	951i
462 Webb Institute	57	72	118i	160i	202i	244i	286	282i
463 SUNY Col New Paltz	56	87	131	257	387	107	36	220
464 Shaw University	56	53	6	0	0	0	--	--
465 SUNY Col Potsdam	50	99	104	140	91	145	113	144i
466 Forest Inst of Prof Psy	48	2,717	--	--	--	--	--	--
467 Western Oregon State Col	40	66	77i	86i	95i	104i	113	96i
468 Fuller Theological Sem	35	110	40	150	50	60	50	20
469 Illinois Benedictine Col	31	94	80i	68i	56i	44i	32	61i
470 CA Sch Prof Psy S Diego	25	66	69	68	65i	62	59	0
Total, 1st 470 insts	20,877,496	19,765,502	18,683,583	17,351,899	16,083,465	14,772,574	13,258,192	11,974,164
471 Spalding University	12	2	--	--	--	--	--	
472 Notre Dame College	10	102	--	--	--	--	--	--
473 La Salle University	3	296	--	--	--	--	--	--
474 Biola University	0	0	0	0	0	13	0	0
475 CA Inst of Integral Stu	0	0	--	--	--	--	--	--
476 CA Sch Prof Psy Alameda	0	0	0	0	0	0	0	0
477 CUNY NY City Tech Col	0	66	--	--	--	--	--	--
478 Catholic U of PR	0	0	91	217	286	515	443	522
479 Chicago Sch of Prof Psy	0	0	--	--	--	--	--	--
480 Fielding Institute	0	0	0	0	0	0	0	0
Total, 1st 480 insts	20,877,521	19,765,968	18,683,674	17,352,116	16,083,751	14,773,102	13,258,635	11,974,686
481 Golden Gate University	0	0	--	--	--	--	--	--
482 Maharishi International U	0	0e	--	--	--	--	--	--
483 Mayo Grad Sch of Med	0	0	0	0	0	0	0	0
484 McNeese State University	0	792	719i	649i	579i	509i	439i	369
485 Pace University All Cmp	0e	0e	--	--	--	--	--	--
486 Pacific Grad Sch of Psy	0	0	--	--	--	--	--	--
487 Pacific University	0	0	22i	44i	66i	88i	110	95i
488 Pepperdine University	0	0	--	--	--	--	--	--
489 Quinnipiac College	0	0	0	0	0	0	0	0
490 RAND Grad Sch Pol Stu	0	0	0	0	0	0	0	0
Total, 1st 490 insts	20,877,521	19,766,760	18,684,415	17,352,809	16,084,396	14,773,699	13,259,184	11,975,150
491 SUNY Inst of Tech Utica	0	0e	--	--	--	--	--	--
492 Southwest State U	0	66	--	--	--	--	--	--
493 Talladega College	0	0	0	0	0	366	--	--
494 The Wright Institute	0	0	0	0	0	0	0	0
495 Trenholm State Tech Col	0	0	0	100	30	22	--	--
496 U CA Office of the Pres	0	0	0	0	0	0	26,439	19,307
497 US International U	0	0	0	0	93	224	0	0
498 University of Dallas	0	0	13i	25i	37i	49i	61	60i
499 Voorhees College	0	0	0	0	0	211	--	--
500 Widener U All Campuses	0	0	54i	105i	156i	207i	258	139
Total, 1st 500 insts	20,877,521	19,766,826	18,684,482	17,353,039	16,084,712	14,774,778	13,285,942	11,994,656

See explanatory information and SOURCE at end of table.

Table B-32. Total R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

Page 11 of 11

Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
Total, all other sampled insts.	0	173,286	122,089	225,843	200,276	201,259	177,101	158,173
Estimated total non-sampled insts.	203,688	0	0	0	0	0	0	0

[1] Johns Hopkins University includes Applied Physics Laboratory, with $459 million in total R&D expenditures.

[2] These data do not include R&D expenditures at university-associated federally funded research and development centers. See tables B-73 and B-74.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-33. Federally financed R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

Page 1 of 11

Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
Total, all institutions	12,661,121	11,955,524	11,090,028	10,232,382	9,636,438	8,989,633	8,192,784	7,343,115
1 Johns Hopkins U[1]	711,692	673,601	666,696	641,239	599,851	590,184	509,009	476,290
2 University of Washington	281,033	266,819	257,840	221,124	203,353	182,453	160,261	145,184
3 MA Institute of Tech[2]	270,718	267,414	237,972	237,667	233,813	215,140	210,419	206,785
4 Stanford University	268,559	254,379	265,687	243,219	255,821	238,650	232,572	204,386
5 U CA San Diego	266,166	243,149	219,843	200,451	182,555	171,479	159,778	142,751
6 University of Michigan	264,722	249,951	223,452	206,276	180,456	174,875	160,854	137,558
7 U WI Madison	225,403	213,955	199,816	183,652	178,862	169,452	162,384	149,665
8 U CA San Francisco	213,252	210,148	202,283	190,936	175,257	159,906	137,747	117,302
9 Columbia University	203,101	182,696	174,777	163,561	156,270	146,712	139,558	133,018
10 Cornell University[2]	193,981	195,229	180,361	173,478	171,249	157,984	153,662	144,604
Total, 1st 10 insts	2,898,627	2,759,341	2,628,727	2,461,603	2,337,487	2,206,835	2,026,244	1,857,543
11 U CA Los Angeles	190,202	189,065	180,743	167,885	164,442	159,002	146,946	130,763
12 Harvard University	190,183	181,969	174,632	156,014	154,090	143,451	133,003	119,955
13 U of Pennsylvania	186,053	173,593	159,574	144,451	133,747	123,810	115,080	111,185
14 University of Minnesota	181,039	174,716	165,926	164,887	143,810	132,880	119,789	109,003
15 Yale University	171,425	168,900	157,345	149,506	144,962	138,835	132,952	116,943
16 Pennsylvania State U	168,679	160,152	151,877	146,212	136,656	114,646	106,020	93,200
17 University of Colorado	158,163	138,584	129,894	119,068	116,394	109,145	96,041	83,144
18 U CA Berkeley[2]	152,528	156,394	148,954	140,261	131,717	124,371	116,565	108,828
19 University of Pittsburgh	152,138	141,934	121,077	99,932	90,700	81,217	72,462	62,060
20 U of Southern California	149,735	149,965	141,713	132,230	123,714	119,005	112,615	101,749
Total, 1st 20 insts	4,598,772	4,394,613	4,160,462	3,882,049	3,677,719	3,453,197	3,177,717	2,894,373
21 U TX Austin	149,586	139,126	124,614	113,192	109,593	94,311	89,982	88,395
22 U of NC Chapel Hill	149,047	130,920	113,774	103,485	92,468	93,280	82,723	72,529
23 Duke University	148,350	136,377	125,742	114,879	106,053	99,036	86,240	67,925
24 University of Arizona	145,696	113,423	105,912	101,818	92,920	80,533	73,309	65,024
25 University of IL Urbana	138,734	141,149	129,086	118,748	117,168	114,398	109,633	104,420
26 Washington University	138,299	129,482	123,863	112,475	105,759	96,829	88,843	77,757
27 Texas A&M University	136,942	122,533	112,918	97,727	93,001	93,584	90,163	75,432
28 University of Rochester[2]	135,863	130,898	110,413	106,874	105,644	101,049	92,533	80,322
29 Ohio State University	113,186	109,069	97,940	88,542	78,878	75,484	69,135	58,555
30 U CA Davis	112,718	105,255	91,318	79,961	77,424	72,718	63,435	56,622
Total, 1st 30 insts	5,967,193	5,652,845	5,296,042	4,919,750	4,656,627	4,374,419	4,023,713	3,641,354
31 California Inst of Tech[2]	112,502	103,888	99,198	100,820	90,577	84,167	78,750	71,086
32 University of Chicago[2]	102,530	95,930	97,182	93,683	96,327	90,459	80,967	75,889
33 U of Iowa	99,536	93,483	88,360	81,007	79,046	74,271	64,370	57,159
34 U of Alabama Birmingham	98,719	94,762	82,392	76,317	74,486	68,204	62,369	54,534
35 Case Western Reserve U	97,302	91,867	83,387	76,390	70,515	68,632	59,078	53,580
36 Georgia Institute of Tech	97,075	98,398	101,295	101,476	94,842	98,048	78,798	63,132
37 Vanderbilt University	92,439	83,683	78,426	71,021	66,747	56,151	44,646	31,343
38 Baylor Col of Medicine	92,404	87,623	85,734	78,752	75,793	69,336	60,825	49,834
39 University of Miami	91,563	91,472	81,856	69,847	68,144	63,101	48,971	38,052
40 New York University	89,013	93,633	87,081	81,896	80,756	81,143	77,746	76,126
Total, 1st 40 insts	6,940,276	6,587,584	6,180,953	5,750,959	5,453,860	5,127,931	4,680,233	4,212,089
41 Emory University	88,735	80,424	69,894	60,586	52,367	46,497	43,668	36,698
42 Carnegie Mellon U[2]	87,790	78,666	69,848	65,290	64,550	65,079	63,009	53,817
43 U MD College Park	86,051	85,041	82,469	77,866	66,410	58,924	55,365	55,194
44 University of Virginia	85,499	75,580	68,151	61,060	58,801	51,214	47,482	41,267
45 Northwestern University	83,684	77,687	69,241	62,718	62,183	57,510	54,245	49,286
46 U of Tennessee System	82,288	76,578	72,047	63,575	58,644	57,736	53,897	45,808
47 Purdue University	82,148	72,954	68,224	67,810	64,464	63,979	64,163	56,302
48 SUNY Buffalo	81,814	80,723	77,628	68,945	66,876	64,453	60,097	51,212
49 Indiana University	81,657	77,377	69,871	61,831	57,155	58,334	52,498	44,211
50 University of Utah	81,263	83,237	79,386	68,769	62,297	61,819	57,383	54,226
Total, 1st 50 insts	7,781,205	7,375,851	6,907,712	6,409,409	6,067,607	5,713,476	5,232,040	4,700,110

See explanatory information and SOURCE at end of table.

Table B-33. Federally financed R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
51 University of Florida	79,630	71,704	67,590	66,777	64,614	60,731	54,785	49,311
52 Woods Hole Oceanograph	74,219	73,546	74,229	67,154e	62,356	64,333	49,400	42,239
53 Michigan State University	73,855	70,294	66,466	61,646	58,221	51,741	49,771	44,989
54 VA Polytech Inst & St U	73,490	61,708	51,281	47,866	45,949	38,597	33,771	32,129
55 SUNY Stony Brook	72,673	68,023	63,608	58,977	55,911	49,726	54,017	40,302
56 Boston University	72,551	71,593	66,677	60,166	60,459	56,402	51,918	49,406
57 U TX SW Med Ctr Dallas	71,468	67,943	61,499	57,746	54,965	51,254	48,357	45,382
58 Yeshiva University	70,718	71,771	68,152	67,831	65,066	58,224	58,823	59,768
59 NC State U Raleigh	69,608	62,470	50,501	46,894	43,787	37,783	34,256	33,662
60 Rutgers the State U NJ	68,149	55,169	56,625	48,822	40,977	35,896	29,204	27,178
Total, 1st 60 insts	8,507,566	8,050,072	7,534,340	6,993,288	6,619,912	6,218,163	5,696,342	5,124,476
61 U CA Irvine	67,245	64,546	55,331	52,652	52,492	46,492	42,894	38,138
62 Colorado State University	66,464	68,733	64,679	55,689	50,744	46,572	44,600	38,961
63 Oregon State University	65,069	61,118	59,739	51,099	50,544	49,112	48,877	46,774
64 U MD Baltimore Prof Sch	59,727	53,556	48,088	43,682	38,841	35,970	33,102	26,244
65 New Mexico State U	59,632	64,821	62,872	57,522	54,688	45,660	43,481	37,904
66 U CA Santa Barbara	59,336	54,057	52,777	46,647	47,873	39,227	36,205	32,856
67 Princeton University[2]	58,544	54,369	55,722	52,335	51,559	47,176	47,245	43,505
68 University of IL Chicago	57,074	51,445	48,484	43,203	43,968	43,288	40,260	34,570
69 Iowa State University[2]	56,439	50,695	45,144	42,793	34,043	28,895	23,306	19,682
70 University of Cincinnati	56,361	57,394	56,375	47,445	44,966	40,598	35,986	32,044
Total, 1st 70 insts	9,113,457	8,630,806	8,083,551	7,486,355	7,089,630	6,641,153	6,092,298	5,475,154
71 CUNY Mt Sinai Sch Med	55,188	49,800	50,853	42,035	43,607	37,233	32,852	31,024
72 University of Georgia	55,005	52,085	48,962	45,019	43,864	42,797	39,703	35,261
73 Georgetown University	54,992	48,463	42,659	41,597	36,093	37,351	30,666	24,477
74 Louisiana St U, All Camp	52,064	52,598	48,641	57,059	48,802	40,114	35,578	31,089
75 University of New Mexico	51,780	42,866	40,033	30,141	25,449	23,934	24,862e	29,096
76 U TX Hlth Sci Ctr San Ant	51,671	48,467	41,048	32,770	29,431	29,324	27,528	22,469
77 Tufts University	49,672	46,625	42,112	39,113	38,290	40,771	41,953	37,148
78 University of Kentucky	48,801	46,774	39,828	31,636	29,612	27,010	27,724	26,261
79 University of Connecticut	48,286	49,051	45,967	46,156	43,477	46,184	38,953	36,884
80 Virginia Commonwealth U	47,923	48,777	45,891	44,974	41,606	35,151	31,150	31,095
Total, 1st 80 insts	9,628,839	9,116,312	8,529,545	7,896,855	7,469,861	7,001,022	6,423,267	5,779,958
81 U TX Hlth Sci Ctr Houston	46,821	38,664	36,478	32,778	29,017	29,500	27,658	24,727
82 Utah State University	46,128	45,426	54,904	61,762	58,965	42,449	34,763	22,109
83 Washington State U	45,513	43,678	38,213	32,257	26,884	22,697	21,361	21,274
84 Oregon Health Sciences U	43,629	38,913	33,548	28,897	27,241	24,162	18,240	15,379
85 Wayne State University	43,354	40,367	35,569	30,583	28,488	28,167	22,716	16,927
86 Thomas Jefferson U	43,215	38,293	28,861	23,100	22,451	21,311	16,766	14,070
87 U TX MD Anderson Cnc	42,416	41,158	34,492	32,314	28,889	28,992	27,129	22,162
88 Tulane University	42,354	36,940	33,304	36,713	28,331	24,095	23,727	21,836
89 Dartmouth College	41,762	44,092	38,791	34,317	30,135	27,222	25,729	21,864
90 University of Kansas	40,816	37,738	31,992	26,419	26,786	26,420	24,880	22,941
Total, 1st 90 insts	10,064,847	9,521,581	8,895,697	8,235,995	7,777,048	7,276,037	6,666,236	5,983,247
91 U of Alaska Fairbanks	40,770	41,616	32,066	34,335	31,896	26,659	23,441e	21,523i
92 U Med & Dent NJ	40,687	35,524	39,092	38,768	33,185	27,983	21,849	16,989
93 University of Dayton	39,994	38,333	34,927	31,132	29,044	26,650	26,101	25,370
94 Rockefeller University	39,990	36,854	37,832	36,759	36,788	41,192	37,452	37,983
95 Florida State University	39,775	38,690	27,649	28,495	32,927	25,498	24,027	21,416
96 University Hawaii Manoa	39,392	41,362	47,684	44,857	42,665	40,574	38,560	34,472
97 U of South Carolina	37,918	28,250	23,743	23,084	20,587	17,596	15,655	14,537
98 Brown University	36,864	38,851	37,856	35,571	36,919	34,506	35,150	32,024
99 Wake Forest University	36,722	41,861	37,505	33,385	30,182	28,511	23,026	18,772
100 University of Oklahoma	35,266	33,298	29,733	25,786	16,871	17,020	16,326	14,453
Total, 1st 100 insts	10,452,225	9,896,220	9,243,784	8,568,167	8,088,112	7,562,226	6,927,823	6,220,786

See explanatory information and SOURCE at end of table.

Table B-33. Federally financed R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
101 U MA Worcester	34,923	33,820	35,413	..	..	..	..	..
102 West Virginia University	34,622	31,092	27,740	19,582	21,639	15,662	14,430	12,099
103 Mississippi State U	33,918	29,616	29,746	25,751	21,426	17,694	13,556	12,387
104 University of Vermont	33,695	31,530	32,757	30,860	30,555	28,535	25,539	22,289
105 U of Rhode Island	33,025	32,609	25,480e	23,980	20,511	21,940	22,967	19,289
106 U TX Med Br Galveston	32,775	30,535	24,281	20,974	21,693	23,152	19,717	16,738
107 U MA Amherst	32,730	32,065	33,408	..	..	..	..	..
108 SUNY Albany	32,511	27,318	25,988	12,204	14,497	15,171	13,595	13,019
109 Medical Col of Wisconsin	31,459	31,261	27,668	25,062	21,594	21,432	19,803	15,551
110 U of Missouri Columbia	31,299	29,612	28,047	27,463	24,422	22,312	20,170	20,250
Total, 1st 110 insts.	10,783,182	10,205,698	9,534,312	8,754,043	8,264,449	7,728,124	7,077,600	6,352,408
111 Arizona State University	30,699	30,032	33,148	26,246	26,590	22,151	19,006	14,009
112 U of Nebraska Lincoln	29,781	23,930	25,382	27,499	22,686	25,803	25,448	24,512
113 Med U of South Carolina	28,507	21,471	17,174	14,367	10,910	11,547	10,956	10,797
114 Temple University	27,140	26,548	26,869	28,873	26,164	25,232	20,137	18,352
115 University of Delaware	26,250	26,170	21,629	20,053	17,588	17,083	13,708	13,662
116 US Naval Postgrad School	26,225	23,640	20,171	19,264	17,333	15,170	15,487	12,934
117 Rice University	25,672	22,016	21,356	22,838	19,997	16,340	14,300	13,155i
118 U of New Hampshire	25,032	23,635	21,591	18,516	14,455	14,594	13,348	12,769
119 George Washington U	24,379	27,698	28,158	23,715	26,817	25,220	19,888	20,142
120 Clemson University	24,133	23,299	18,771	16,594	14,221	12,484	13,148	9,016
Total, 1st 120 insts.	11,051,000	10,454,137	9,768,561	8,972,008	8,461,210	7,913,748	7,243,026	6,501,756
121 U CA Santa Cruz	23,802	21,821	20,237	15,805	13,855	12,543	12,263	11,432
122 U CA Riverside	23,743	19,126	17,167	16,031	15,806	15,584	16,672	15,001
123 Loyola U of Chicago	23,587	18,230	18,071	14,703	6,203	6,051	4,447	3,804
124 University of Houston	22,830	34,350	21,881	20,140	17,575	16,358	14,152	11,040
125 University of Oregon	22,204	21,465	21,002	19,311	20,151	17,286	14,573	12,783
126 Rensselaer Polytech Inst	22,090	22,106	24,313	23,372	22,809	19,143	18,320	14,207
127 Brandeis University	21,585	21,825	21,800	21,280	18,819	19,080	18,595	16,857i
128 U of Alabama Huntsville	21,583	24,983	24,432	21,761	21,355	18,001	11,998	7,548
129 Kansas State University	21,547	19,582	18,583	15,726	15,651	15,951	14,294	13,270
130 Florida A&M University	20,730	18,954	18,698	15,592	13,110	10,509	8,674	8,100
Total, 1st 130 insts.	11,274,701	10,676,579	9,974,745	9,155,729	8,626,544	8,064,254	7,377,014	6,615,798
131 Oklahoma State University	20,440	20,840	15,384	15,756	17,744	14,116	12,850	9,575
132 U of South Florida	19,910	16,718	18,010	23,578	30,481	26,576	8,841	7,890
133 Syracuse University	19,309	16,818	14,715	14,192	18,924	20,367	22,377	17,987
134 U of Nevada Reno	18,799	17,097	14,085	10,858	11,922	8,647	9,989	8,033
135 Auburn University	18,347	17,438	15,415	15,279	14,629	15,179	18,243	13,446
136 Unif Svcs U of Hlth Sci	18,124	22,319	20,377i	18,436i	16,495i	14,554i	12,613	12,076
137 St Louis University	18,120	18,583	17,708	16,358	14,106	12,272	8,332	7,783i
138 SUNY Hlth Sci Ctr Brklyn	16,695	17,916	15,896	17,949	14,574	11,552	10,754	10,494
139 University North Dakota	16,660	16,467	15,895	14,470	14,398	14,104	12,075	12,515
140 University of Idaho	16,586	15,877	16,601	15,149	13,812	12,207	10,970	8,720
Total, 1st 140 insts.	11,457,691	10,856,652	10,138,831	9,317,754	8,793,629	8,213,828	7,504,058	6,724,317
141 University of Notre Dame	16,358	16,415	15,058	13,587	12,867	13,209	13,579	10,399
142 The Medical Col of PA	16,130	16,990	17,914	14,960	11,704	11,514	9,020	7,449
143 U Arkansas Main	16,040	14,398	12,421	12,371	10,831	8,955	8,193	7,696
144 Northeastern University	16,037	15,339	12,841	11,529i	10,217	10,201	8,966	8,088
145 U Mississippi, All Camp	15,836	14,917	16,097	16,937	14,973	10,841	9,317	8,247
146 Montana State University	15,738	14,096	13,443	10,109	9,052	8,781	10,710	8,727i
147 Lehigh University	15,363	16,038	17,426	11,870	11,242	9,925	10,297	9,679
148 Desert Research Institute	15,272	15,514	11,508	9,795	8,767	8,968	8,088	6,539
149 Howard University	15,196	14,819	13,976	10,754	13,067	12,146i	11,227i	10,308
150 University of Wyoming	15,115	14,575	13,298	12,782	12,207	13,804	11,136	8,701
Total, 1st 150 insts.	11,614,776	11,009,753	10,282,813	9,442,448	8,908,556	8,322,172	7,604,591	6,810,150

See explanatory information and SOURCE at end of table.

Table B-33. Federally financed R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
151 New York Medical College	14,913	13,468	13,061	11,056	9,028	10,021	11,097	10,038
152 Rush University	14,831	12,787	9,130	7,010	6,083	7,582	6,553	7,823
153 CUNY City College	13,585	14,785	12,175	11,220	10,554	9,005	8,071	7,552
154 U Arkansas Medical Sci	13,410	10,964	9,642	7,807	6,654	5,258	5,846	4,561
155 U of Central Florida	13,276	12,527	9,151	10,406	9,354	11,153	3,476	2,701 i
156 George Mason University	12,679	10,498	8,439	5,601	2,494	1,171	1,480	571
157 NJ Inst of Technology	12,572	8,275	5,778	4,080	2,731	1,082	1,085	847
158 San Diego St University	12,268	16,862	15,679	16,744	14,647	13,048	12,688	11,386
159 U of NE Med Ctr Omaha	12,256	10,131	9,740	10,518	9,078	8,572	7,765	7,243
160 U PR Med Sci Campus	11,973	9,775	14,619	8,610	5,366	5,235	4,218	5,389
Total, 1st 160 insts	11,746,539	11,129,825	10,390,227	9,535,500	8,984,545	8,394,299	7,666,870	6,868,261
161 The University of Alabama	11,482	8,583	6,877	5,427	6,941	6,542	6,376	5,139
162 U of Maine	11,386	8,959	8,975	10,062	9,046	8,288	7,048	7,787
163 Texas Tech University	11,360	10,897	11,121	9,323	9,349	10,939	11,620	11,089
164 Mercer University	11,115	10,241	7,325	6,388	3,590	1,812	386	381
165 Clark Atlanta University	11,025	10,484	9,985	6,538	6,055 i	5,575 i	5,095 i	4,615 i
166 Drexel University	11,006	11,335	9,[illegible]	7,559	6,761	6,371	6,600	7,870
167 Michigan Tech University	10,984	9,777	8,242	6,870	6,045	5,210	6,226	4,757
168 Florida International U	10,936	9,289	--	--	--	--	--	--
169 North Dakota State U	10,877	8,756	8,677	7,100	6,417	5,292	4,210	2,870
170 Oregon Grad Inst Sci Tech	10,458	9,591	7,138	6,962	6,837	6,582	6,513	4,997
Total, 1st 170 insts	11,857,168	11,227,737	10,468,436	9,601,729	9,045,586	8,450,910	7,720,944	6,917,766
171 Col of William & Mary	10,426	10,335	8,209	7,283	6,460	5,349	4,942	4,020
172 Med Col PA Hahnemann U	10,194	9,674	9,797	7,492	8,244	7,809	6,818	6,792
173 Med Col Hampton Roads	10,162	9,753	6,966	7,093	7,782	6,887	5,291	2,611
174 Meharry Medical College	10,154	9,074	6,673	7,014	6,391	6,397	5,125	4,414
175 NC A&T State University	10,132	8,759	8,196	8,205	7,503	5,752	5,717	3,603
176 Sthrn IL U Carbondale	9,931	7,437	7,382	7,092	8,035	6,571	6,816	6,045
177 Wright State University	9,624	10,081	8,655	8,047	7,426	5,714	5,012	3,695
178 Worcester Polytech Inst	9,584	9,164	6,018	3,050	2,365	2,411	1,655	1,087
179 U of Nevada Las Vegas	9,543	10,585	10,006	17,568	13,270 i	8,972 i	4,674	3,991 i
180 U PR Mayaguez	9,369	8,487	9,117	11,727 i	14,337	14,114	12,879	8,732
Total, 1st 180 insts	11,956,287	11,321,086	10,549,455	9,686,300	9,127,399	8,520,886	7,779,873	6,962,756
181 University of Louisville	9,274	8,924	7,267	6,750	8,637	5,953	5,438	4,517
182 Medical Col of Georgia	9,121	7,713	7,747	8,081	8,045	7,392	7,621	7,705
183 U TX El Paso	9,085	9,229	7,433	6,972	5,451	2,561	1,893	2,068
184 Western Illinois U	8,983	10,096	8,133 i	6,170 i	4,207 i	2,244 i	281	256 i
185 Alabama A&M University	8,954	7,295	5,635	5,481	5,560	4,801	5,121	4,356
186 U of South Alabama	8,838	8,270	7,769	7,798	7,237	6,966	5,273	4,715
187 Med Col of Ohio Toledo	8,726	8,286	7,083	5,970	5,956	5,855	4,530	5,756
188 University of Montana	8,675	7,303	5,024	3,692	3,468	2,771	2,925e	2,572
189 Albany Medical College	8,344	8,564	6,740	6,291	6,073	7,259	7,915	8,795
190 Colorado School of Mines	8,161	7,050	6,348	6,487	5,310	4,435	4,997	5,146
Total, 1st 190 insts	12,044,448	11,403,816	10,618,634	9,749,992	9,187,343	8,571,123	7,825,867	7,008,642
191 Brigham Young University	8,126	7,967	8,106	7,082	5,357	4,785	5,660	5,020
192 U WI Milwaukee	7,977	7,455	7,641	6,808	6,715	5,447	4,662	3,939
193 Boston College	7,938	8,151	8,695	8,673	6,798	5,824	5,891	4,765
194 Old Dominion University	7,888	7,050	6,284	6,576	7,036	6,175	5,334	4,444
195 C R Drew U of Med & Sci	7,674	6,483	5,949	5,311	4,104 i	2,898	2,826	2,913
196 Stevens Inst of Tech	7,644	10,552	5,435	3,116	2,960	2,532	2,838	4,100
197 NM Inst Mining & Tech	7,582	5,373	7,682	6,646 i	5,610	7,183	5,492	8,923
198 U Southern Mississippi	7,291	6,351	4,820	6,736	3,944	3,588	2,484	1,858
199 U MA Lowell	7,281	5,959	6,872	6,541	4,662	5,974	5,608	5,087
200 U TX Dallas	7,224	8,031	7,676	4,822	5,888	6,812	7,109	7,850
Total, 1st 200 insts	12,121,073	11,477,188	10,687,794	9,812,303	9,240,417	8,622,341	7,873,771	7,057,541

See explanatory information and SOURCE at end of table

Table B-33. Federally financed R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
201 CUNY Hunter College	7,156	6,875	5,687	5,524	4,531	4,065	4,223	4,373
202 Polytechnic University	6,872	6,394	5,600	5,600	7,025	6,824	6,561	6,729
203 Florida Atlantic U	6,797	5,655	4,431	2,953	2,010	1,295	847	648
204 Georgia State University	6,771	5,826	4,021	3,516	3,621	2,507	2,340	2,106
205 Illinois Inst of Tech	6,738	6,349	4,165	4,114	3,887	3,947	5,277	6,586
206 Tuskegee University	6,694	5,154	4,498	4,137	4,783	4,967	3,543	2,598
207 Morehouse School of Med	6,663	6,597	6,155	5,652i	5,149	4,238	1,815	0
208 SUNY Hlth Sci Ctr Syrcse	6,555	7,238	7,500	10,667	9,965	9,520	7,497	6,427
209 U of Missouri Rolla	6,472	6,128	4,819	4,360	3,863	3,459	3,670	4,261
210 Northern Illinois U	6,238	5,663	5,384	4,617	3,251	2,948	2,360	1,897
Total, 1st 210 insts	12,188,029	11,539,067	10,740,054	9,863,443	9,288,502	8,666,111	7,911,904	7,093,166
211 University of Denver	6,144	7,555	7,236	6,484i	7,476	6,825	6,453	8,742
212 Clarkson University	6,115	5,795	4,229	4,229	3,841	4,359	5,141	5,253
213 U MD Baltimore County	6,080	4,845	4,893	4,723	4,147	3,457	3,626	2,743
214 U MD Biotechnology Inst	6,079	--	--	--	--	--	--	--
215 Catholic U of America	6,058	5,796	5,388	6,301	6,783	6,077	5,446	5,061
216 Tennessee State U	6,031	5,245	4,465	3,701	3,290	3,382	3,382	2,717
217 Kent State University	6,005	6,363	5,806	5,171	4,656	2,613	3,027	2,993
218 Ohio University	5,836	5,168	4,856	4,539	4,140	3,722	3,540	2,828
219 South Dakota State U	5,711	5,033	4,751	4,102	3,666	3,254	3,343	3,022
220 Prairie View A&M U	5,693	4,885	4,824	3,373	3,406	3,568	1,560e	1,334
Total, 1st 220 insts	12,247,781	11,589,752	10,786,502	9,906,066	9,329,907	8,703,368	7,947,422	7,127,859
221 Northern Arizona U	5,614	6,348	4,180	3,563	2,749	2,683	2,315	1,922
222 U MD Center for EES	5,452	5,413	4,321	2,857	2,379	2,519	2,542	2,629
223 Finch U Hlth Sci Chicago	5,214	5,033	4,167	3,650	3,547	3,269	3,246	2,147
224 East Carolina University	5,188	4,392	3,605	3,612	3,499	2,690	2,668	1,919
225 SUNY Binghamton	5,100	5,005	4,611	3,130	3,702	2,914	2,732	2,773
226 Loma Linda University	5,082	4,963	4,036	2,529	3,349	2,294	3,867	4,801
227 Hampton University	5,078	4,597	3,272	3,345	2,307	2,168	--	--
228 Southern Methodist U	4,984	4,932	5,138	5,966	11,000e	6,244	5,315	4,005
229 U of Missouri Kansas City	4,758	4,967	4,419	3,123	2,767	2,391	1,485	812
230 Creighton University	4,653	3,962	3,478	2,580	2,405	2,386	1,828	1,520i
Total, 1st 230 insts	12,298,904	11,639,364	10,827,729	9,940,421	9,367,611	8,732,926	7,973,420	7,150,387
231 U TX Arlington	4,637	3,995	3,296	2,741	1,795	1,406	2,255	1,667
232 Cleveland State U	4,620	5,187	5,042	4,528	3,695	2,760	2,047	2,019
233 Southern U A&M All Camp	4,620	4,828	4,407	4,332	4,066i	3,801e	3,112	2,196
234 Virginia State University	4,529	4,761	6,031	5,347	2,744	2,056	2,476	2,326i
235 Portland State University	4,377	3,869	2,771	2,580	2,693	1,999	1,923	1,999
236 Jackson State University	4,220	3,831	3,849	3,429	3,381	3,624	2,801	2,040
237 Xavier University of LA	4,176	3,145	2,365	2,424	1,902	1,294	--	--
238 CA St U Long Beach	4,072i	3,830i	3,830i	3,830i	3,830i	3,830i	3,830	3,208i
239 U North TX Health Sci Ctr	4,045	3,753	2,804	3,135	2,031	2,518	2,508	2,381
240 Memphis State University	4,027	3,504	3,586	2,954	2,666	2,299	1,647	1,268
Total, 1st 240 insts	12,342,227	11,680,067	10,865,710	9,975,721	9,396,414	8,758,513	7,996,019	7,169,491
241 University of Akron	4,016	4,329	4,243	3,411	3,005	2,525	2,199	1,785
242 Delaware State University	3,686	1,262	1,253	915	920	920	--	--
243 U PR Rio Piedras	3,660	3,616	2,626	2,860	2,980	2,855	3,662	3,217
244 University of Toledo	3,505	3,727	3,304	2,997	2,101	1,966	1,894	1,583i
245 Morgan State University	3,423	1,456	1,179	683	655	638	742e	346
246 SUNY Col Env Sci Frstry	3,351	3,177	2,427	2,126	1,973	1,883	1,669	1,209
247 University of Tulsa	3,319	2,337	1,369	1,264	1,037	926	911	823i
248 Oakland University	3,202	3,026	3,013	2,852	1,882	2,767	2,475	3,035
249 Seton Hall University	3,072	2,893i	2,723i	2,553i	2,383i	2,213i	2,043i	1,873i
250 American University	3,052	3,569	3,926	4,426	3,532	3,480	3,623	2,980
Total, 1st 250 insts	12,376,513	11,709,459	10,891,773	9,999,808	9,416,882	8,778,686	8,015,237	7,186,342

See explanatory information and SOURCE at end of table.

Table B-33. Federally financed R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
251 Alcorn State University	3,039	3,038	2,132	1,665	1,487	1,850	1,692i	1,623i
252 SD Sch of Mines & Tech	2,903	2,556	2,362	2,056	2,268	2,128	1,815	1,462
253 Ponce School of Medicine	2,874	2,436	1,573	1,347	919	782	642	602
254 Lincoln University	2,869	2,726	2,851	2,763	2,600	2,706	—	—
255 University of North Texas	2,858	2,277	1,932	1,942	1,974	2,813	2,828	3,022
256 Miami University (OH)	2,789	2,343	1,918	2,050	1,365	1,659	1,479i	1,301i
257 U MA Dartmouth	2,771	1,802	1,425	—	—	—	—	—
258 South Carolina State Col	2,739	2,460	2,075	1,309	1,308	1,014i	721	810i
259 Wesleyan University	2,710	2,611	2,588	1,458	1,949	2,193	2,007	1,890
260 Western Michigan U	2,699	2,383	1,436	845	585	488i	391	227
Total, 1st 260 insts.	12,404,764	11,734,091	10,912,065	10,015,243	9,431,337	8,794,319	8,026,812	7,197,279
261 U TX San Antonio	2,685	2,185	—	—	—	—	—	—
262 Kentucky State University	2,665	2,349	2,525	2,026	2,856	1,721	1,697	1,827
263 Marquette University	2,640	2,524	2,612	2,068	1,855	1,487	1,671	1,080
264 Texas Christian U	2,600	2,693	2,765	2,430	1,362	488	302	493
265 Fort Valley State College	2,591	2,413	2,384	2,047	1,938	1,741	—	—
266 U of Missouri St Louis	2,559	1,818	1,495	1,046	1,167	1,430	779	698
267 Rochester Inst of Tech	2,478	1,561	1,341i	1,124i	907i	690i	473	406i
268 Air Force Inst of Tech	2,426	3,252	3,813	2,243	2,200	1,800i	1,400	456
269 U MA Boston	2,382	2,133	2,019	—	—	—	—	—
270 Texas Southern U	2,353	3,652	2,028	1,810	1,363	1,293	1,419	1,263i
Total, 1st 270 insts.	12,430,143	11,758,671	10,933,047	10,030,037	9,444,985	8,804,969	8,034,553	7,203,502
271 Illinois State University	2,347	1,839	1,470	1,241	1,193	973	1,011	854
272 CUNY Grad Sch & U Ctr	2,341	2,386	2,811	2,161	2,990	2,112	1,690	1,848
273 U Arkansas Pine Bluff	2,341	2,164	2,372	2,176	1,188	1,148	1,199	1,047
274 Lamar University	2,320	2,158	2,046	1,914	1,317	388	2	64
275 Bowling Green State U	2,317	1,686	1,496	1,602	1,882	1,770	1,475	1,037
276 Clark University	2,301	1,717	1,121	936	919	794	820	942
277 U of Southwestern LA	1,998	1,130	1,007	929	874	818	863	589
278 U of NC Greensboro	1,971	1,963	1,800	1,666	806	596	278	370
279 Langston University	1,929	1,570	1,446	1,310	1,200	1,961	—	—
280 University of DC	1,811e	1,705i	1,600	1,585	1,455	1,330i	1,205	738
Total, 1st 280 insts.	12,451,819	11,776,989	10,950,216	10,045,557	9,458,809	8,816,859	8,043,096	7,210,991
281 Johnson C Smith U	1,803	377	276	454	467	480		—
282 Hofstra University	1,786	1,073	211	418	445	256	91	215
283 Wichita State University	1,752	2,315	2,575	1,768	1,041	1,921	3,228	1,175
284 Sam Houston State U	1,694	380	220	229	93	84	73	115
285 U Ctrl Del Caribe Esc Med	1,664	1,426	1,100	617	546	640	525	577
286 CUNY Queens College	1,663	1,911	1,787	1,989	1,987	1,919	1,612	1,461i
287 Florida Inst of Tech	1,654	1,903	2,080	1,640	1,251	898	552	577
288 U of the Virgin Islands	1,653	2,283	2,403i	2,521i	2,639e	2,600	2,578	1,447e
289 Inst Paper Sci and Tech	1,629	1,311	1,317	1,408	965	1,382	1,049	1,469
290 Northeast Louisiana U	1,600	1,391	2,112	663	675	56	35	25
Total, 1st 290 insts.	12,468,717	11,791,359	10,964,297	10,057,264	9,468,918	8,827,095	8,052,839	7,218,052
291 Loyola College	1,564	1,131	—	—	—	—	—	—
292 Wellesley College	1,537	1,524i	1,512i	1,500i	1,488i	1,476i	1,464	1,128
293 Fisk University	1,514	1,418	1,235	616	1,156	1,131	1,379	777
294 Idaho State University	1,489	1,149	742	532	549	378	226	268
295 New Mexico Highlands U	1,459	283	247i	211i	175i	139i	103	169i
296 Boise State University	1,452	557	—	—	—	—	—	—
297 Wentworth Inst of Tech	1,434	1,634	1,287	1,460	1,435	1,383	1,457	1,431i
298 U WI Superior	1,411	1,338	1,243	1,402	1,550	1,495	1,309	1,414
299 U of South Dakota	1,357	1,511	981	759	940	784	685	645i
300 U of Detroit Mercy	1,339	770	318	309	245	55	34	82i
Total, 1st 300 insts.	12,483,273	11,802,674	10,971,862	10,064,053	9,476,456	8,833,936	8,059,496	7,223,966

See explanatory information and SOURCE at end of table

Table B-33. Federally financed R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
301 Fordham University	1,304	1,006	1,468	1,303	1,723	2,063	1,752	1,805
302 Bryn Mawr College	1,294	1,277	801	976	1,252	536	687	696
303 Chicago State University	1,237	1,048	936i	827i	718i	609i	500	473i
304 Tennessee Tech U	1,208	1,266	1,534	949	1,286	743	731	711
305 Central State University	1,180	1,272	930	680	2,323	449	--	--
306 CUNY Brooklyn College	1,138	1,373	1,454i	1,533i	1,612i	1,691i	1,770	1,668i
307 N.E. Ohio Univs Col Med	1,136	965	936	724	708	811	719	612
308 U of Southern Colorado	1,131	1,031	--	--	--	--	--	--
309 CUNY H H Lehman Col	1,130	0	--	--	--	--	--	--
310 U MD Eastern Shore	1,128	2,691	3,096	1,371	1,552	2,203	1,736	1,522
Total, 1st 310 insts.	12,495,159	11,814,603	10,983,017	10,072,416	9,487,630	8,843,041	8,067,391	7,231,453
311 Villanova University	1,061	980	882	708	943	885	223	459
312 Barnard College	1,031	1,007	869	540	546	665	587	542i
313 Alabama State University	1,026	528	502	442	403	456	--	--
314 East Tennessee State U	1,026	791	886	1,060	1,219	919	447	486
315 Spelman College	954	569	514	358	348	272	--	--
316 West Chester U of PA	945	398	346i	296i	246i	196i	146	116i
317 Bowie State University	937	465	425	234	35	0	--	--
318 Morris Brown College	927	1,227	1,217e	442	464e	164	--	--
319 Benedict College	925	600	702	0	0	0	--	--
320 Nova University	885	805	974	1,395	1,341	981	839	779
Total, 1st 320 insts.	12,504,876	11,821,973	10,990,334	10,077,891	9,493,175	8,847,579	8,069,633	7,233,835
321 De Paul University	868	893	594	507	623	772	468	189
322 St John's University (NY)	862	590	743	528	519	361	308	290i
323 Alfred University	859	797	403	320	344	449	285	382
324 U WI Stout	835	954	1,174	1,173	121	39	82	63i
325 Baylor Col of Dentistry	830	537	437	696	682	641	525	450
326 CUNY York College	819	905	872	622	655	754	673	559
327 Winston Salem State U	780	529	583	617	532	650	--	--
328 Tougaloo College	745	636	702	684	566	787	--	--
329 Selma University	740	420	798	650	790	816	--	--
330 Morehouse College	730	1,117	1,214	917	868	997	--	--
Total, 1st 330 insts.	12,512,944	11,829,351	10,997,854	10,084,605	9,498,875	8,853,845	8,071,974	7,235,768
331 University of Richmond	718	390	--	--	--	--	--	--
332 Texas Woman's University	714	692	583	466	476	325	243	173
333 Duquesne University	712	297	202	250	216	68	68	68
334 U WI Stevens Point	701	399	234	128	167	226	180	208i
335 Ball State University	696	606	330	226	153	178	197	317
336 Monmouth College (NJ)	694	357e	141e	135	46	100	0	0i
337 Albany State College	675	1,068	627	536	516	653	348	263e
338 Norfolk State University	671	566	769	726	825	648	400	266
339 CUNY Col Staten Island	652	705	615	634	576	579	371	334i
340 SUNY Col Oswego	638	299	188	75	71	76	58	236
Total, 1st 340 insts.	12,519,815	11,834,730	11,001,543	10,087,781	9,501,921	8,856,698	8,073,839	7,237,633
341 SUNY Col Plattsburgh	629	741	924	1,027	930	755	912	742
342 Smith College	627	544i	462i	380i	298	903	411	375i
343 New Sch for Soci Res	616	376	376	344	293	251	384	422
344 SUNY Col Buffalo	601	1,290	1,157	1,000	520	583i	641i	699i
345 Hampshire College	586	558	--	--	--	--	--	--
346 Haverford College	584	593i	597i	601i	605i	609i	613	552i
347 Swarthmore College	582	592	633i	670i	707i	744i	781	636i
348 Tarleton State University	572	570	12	370	88	0	0	0
349 U of Northern Iowa	565	485	108	58	136	108	91	74i
350 Marshall University	540	570	623	883	1,244	1,647	1,484	901
Total, 1st 350 insts.	12,525,717	11,841,049	11,006,435	10,093,114	9,506,742	8,862,298	8,079,156	7,242,034

See explanatory information and SOURCE at end of table.

Table B-33. Federally financed R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
351 Louisiana Tech University	505	687	1,660	1,072	2,629	2,842	760	828
352 Wilberforce University	505	200	--	--	--	--	--	--
353 Lincoln University (PA)	502	432	953	437	632	692e	789	591i
354 University of San Diego	502	302	--	--	--	--	--	--
355 Kirksville Col Osteo Med	478	369	392	254	198	306	517i	727
356 Midwestern University	465	303	149	175	318	314	526	419
357 Fort Lewis College	460	494	--	--	--	--	--	--
358 CA Sch Prof Psy Fresno	452	74	252	208	985	1,566	940	476
359 Stephen F Austin St U	441	330	292	282	289	332	283	233
360 Mount Holyoke College	438i	399i	399i	399i	399i	399i	399	305i
Total, 1st 360 insts.	12,530,465	11,844,639	11,010,532	10,095,941	9,512,192	8,868,749	8,083,370	7,245,613
361 Fayetteville State U	437	273	187	275	154	258	--	--
362 Santa Clara University	422e	422	459	408	550	672	712	746e
363 Appalachian State U	412	284	--	--	--	--	--	--
364 SUNY Col Old Westbury	412	400	--	--	--	--	--	--
365 North Carolina Central U	409	313	683	441i	199	422e	350	317i
366 Central Michigan U	406	628	734	110	60	179	276	134
367 U WI Eau Claire	396	179	178	126	268	355	254	218i
368 Rust College	389	346	798	271	156	214	--	--
369 Baylor University	368	407	635	324	369	346	353	329
370 Indiana State University	367	391	498	307	314	340	340	184
Total, 1st 370 insts.	12,534,483	11,848,282	11,014,704	10,098,203	9,514,262	8,871,535	8,085,655	7,247,541
371 Bethune Cookman College	358	218	590	548	494	420	--	--
372 U Osteo Med & Hlth Sci	327	343	0	0	43	86	88	0
373 Bowdoin College	325	257	234i	211i	188i	165i	142	143i
374 Mississippi Valley St U	319	213	71	64	43	14	31	0
375 Murray State University	309	325	281i	240i	199i	158i	117	158i
376 College of the Holy Cross	307	545	473i	402i	331i	260i	189	180i
377 Phila Col Osteopathic Med	304	830	314	198i	83	302	179	168
378 Claremont Graduate Sch	293	53	15	66	47	106	337	343
379 Valparaiso University	293	260i	228i	196i	164i	132i	100	0
380 CA St U Chico	270	270	222i	174i	126i	78i	30	267
Total, 1st 380 insts.	12,537,588	11,851,596	11,017,132	10,100,302	9,515,980	8,873,256	8,086,868	7,248,800
381 Ohio Wesleyan University	260	245	--	--	--	--	--	--
382 CUNY Bernard Baruch Col	259	354	223	344	207	287	125	125i
383 SUNY Col of Optometry	258	164	160	118	294	292	286	398
384 Phila Col of Phar & Sci	250	160	279	368	381	288	49	47
385 Elizabeth City State U	241	605	339	0	15	26	--	--
386 Virginia Military Inst	240	252	224i	199i	174i	149i	124	127i
387 SUNY Col Cortland	236	173	113	88	75	102	78	67i
388 SUNY Col Brockport	234	171	165	425	297	230	155	144i
389 U WI Parkside	220	310	413	362	581	651	497	465i
390 Jarvis Christian College	219	336	97	60	75	60	--	--
Total, 1st 390 insts.	12,540,005	11,854,366	11,019,145	10,102,266	9,518,079	8,875,341	8,088,182	7,250,173
391 Coppin State College	218	77	103	212	387	388	--	--
392 U WI Oshkosh	207	245	213	280	238	161	147	127i
393 Kutztown U of PA	206	46	126	43	37	37	31	35i
394 Furman University	200	179	175i	171i	167i	163i	159	52
395 Pitzer College	197	280	--	--	--	--	--	--
396 West Virginia State Col	195	161	172	210	138	75	--	--
397 SUNY Col Geneseo	194	317	245	135	200	151	173	142i
398 Union College (NY)	194	444	279	261i	247i	233i	219i	205i
399 Teachers Col, Columbia U	190	0	138	95	181	230	186	460
400 Drew University	189	125	--	--	--	--	--	--
Total, 1st 400 insts.	12,541,995	11,856,240	11,020,596	10,103,673	9,519,674	8,876,779	8,089,097	7,251,194

See explanatory information and SOURCE at end of table.

Table B-33. Federally financed R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
401 Canisius College	188	699	734	221	524	194	279	243i
402 College of Wooster	179	151	136i	124i	112i	100i	88	85i
403 U of Northern Colorado	177	185	158	91	54	66	0	10
404 New York Inst Technology	174	141	94i	47i	0	0	352	373
405 CUNY Jay Col Crim Just	164	412	--	--	--	--	--	--
406 Oakwood College	161	186	206	179	226	0	--	--
407 Indiana U of PA All Cmp	159	196	--	--	--	--	--	--
408 Grambling State U	155	155	164i	173i	182	106	64	128
409 Kennesaw State College	148	121	--	--	--	--	--	--
410 University of Hartford	148	0	--	--	--	--	--	--
Total, 1st 410 insts.	12,543,648	11,858,486	11,022,088	10,104,508	9,520,772	8,877,245	8,089,880	7,252,033
411 Long Island University	145	109	142	20	57	191	346	247
412 U WI Green Bay	143	152	184	198	267	252	165	212i
413 U WI La Crosse	141	211	315	258	185	108	79	116
414 Philander Smith College	137	157	136	154	120	154	--	--
415 University of New Haven	134	49	--	--	--	--	--	--
416 Savannah State College	128	168	195	212	221	179	--	--
417 New England Col Opt	120	65	--	--	--	--	--	--
418 SUNY Purchase College	116	67	--	--	--	--	--	--
419 Western Carolina U	114	83	--	--	--	--	--	--
420 Dillard University	110	0	0	0	0	0	0	0
Total, 1st 420 insts.	12,544,936	11,859,547	11,023,060	10,105,350	9,521,622	8,878,129	8,090,470	7,252,608
421 Andrews University	109	82	98	101	96	24	23e	20i
422 Southern Col of Optometry	109	109	--	--	--	--	--	--
423 Bennett College	105	122	784	62	358	229	--	--
424 Claflin College	103	180	240	381	203	0e	--	--
425 Bates College	101	112	--	--	--	--	--	--
426 Adelphi University	98e	98	89	152	216i	280	192i	105
427 Goucher College	92	91	29	54	32	27	25	33i
428 U WI Whitewater	92	80	65	31	42	107	37	28i
429 Pacific Lutheran U	87	0	25	33	244	10	35	43i
430 Antioch University	85	116	87	0	0	0	0	1i
Total, 1st 430 insts.	12,545,917	11,860,537	11,024,477	10,106,164	9,522,813	8,878,806	8,090,782	7,252,838
431 Knoxville College	85	23i	33i	42i	51i	50	--	--
432 Towson State University	85	171	151i	132i	113i	94i	75	95
433 Iona College	80	91	--	--	--	--	--	--
434 U WI River Falls	70	312	268	118	27	43	35	28i
435 Col Osteo Med of Pacific	68	0	0	0	0	0	0	0
436 University of the Pacific	60	1,043	995	1,039	897	990	941i	894i
437 University of Portland	59	48	198	121	311	0	200	160i
438 Northeast Missouri St U	58e	58	52	26	18	122	38	50
439 Shaw University	56	53	6	0	0	0	--	--
440 SUNY Col Fredonia	55	98	116	27	59i	90i	121	101i
Total, 1st 440 insts.	12,546,593	11,862,434	11,026,296	10,107,669	9,524,289	8,880,195	8,092,192	7,254,166
441 Fairleigh Dickinson U	53e	53	2	370	2,364	2,355	3,274	2,402
442 Central Missouri St U	49	13	--	--	--	--	--	--
443 Middle Tennessee State U	44	36	--	--	--	--	--	--
444 East Texas State U	41	39	0	85	113	89	1	12
445 SUNY Col Oneonta	39	1e	1e	1	22	0	0	17i
446 Providence College	29	55	47	65	0	0	0	0
447 Oral Roberts University	28	0	0	0	0	290	388	378i
448 University of Bridgeport	22	27	--	--	--	--	--	--
449 SUNY Col New Paltz	21	31	71	153	112	54	1	103
450 Western Oregon State Col	20	33	24i	18i	12i	6i	0	2i
Total, 1st 450 insts.	12,546,939	11,862,722	11,026,441	10,108,361	9,526,912	8,882,989	8,095,856	7,257,080

See explanatory information and SOURCE at end of table.

Table B-33. Federally financed R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
451 Wheeling Jesuit College	20	20	--	--	--	--	--	--
452 Loras College	19	2	7i	8i	9i	10i	11	8i
453 Grand Valley State U	10	0	0	0	0	7	0	5i
454 Sul Ross State University	9	47	38	71	171	98	107	96i
455 Spalding University	5	0	--	--	--	--	--	--
456 Biola University	0	0	0	0	0	0	0	0
457 CA Inst of Integral Stu	0	0	--	--	--	--	--	--
458 CA Sch Prof Psy Alameda	0	0	0	0	0	0	0	0
459 CA Sch Prof Psy L.A.	0	0	50	245	1,163	1,383	322	164
460 CA Sch Prof Psy S Diego	0	0	0	0	0i	0	0	0
Total, 1st 460 insts.	12,547,002	11,862,791	11,026,536	10,108,685	9,528,255	8,884,487	8,096,296	7,257,353
461 CUNY NY City Tech Col	0	66	--	--	--	--	--	--
462 Catholic U of PR	0	0	68	214	265	492	416	513
463 Chicago Sch of Prof Psy	0	0	--	--	--	--	--	--
464 Fielding Institute	0	0	0	0	0	0	0	0
465 Forest Inst of Prof Psy	0	0	--	--	--	--	--	--
466 Fuller Theological Sem	0	80	40	0	0	3	0	0
467 Golden Gate University	0	0	--	--	--	--	--	--
468 Illinois Benedictine Col	0	27	20i	15i	10i	5i	0	8i
469 Institute of Textile Tech	0	0	0	0	0	0	0	0
470 La Salle University	0	143	--	--	--	--	--	--
Total, 1st 470 insts.	12,547,002	11,863,107	11,026,664	10,108,914	9,528,530	8,884,987	8,096,712	7,257,874
471 MA Col Phar Allied Hlth	0	0	0	0	0i	0	5i	9i
472 Maharishi International U	0	0e	--	--	--	--	--	--
473 Mayo Grad Sch of Med	0	0	0	0	0	0	0	0
474 McNeese State University	0	26	62i	98i	134i	170i	206i	242
475 Northeastern Illinois U	0	0	0	22	68	26	0	13i
476 Notre Dame College	0	51	--	--	--	--	--	--
477 Pace University All Cmp	0e	0e	--	--	--	--	--	--
478 Pacific Grad Sch of Psy	0	0	--	--	--	--	--	--
479 Pacific University	0	0	0i	0i	0i	0i	0	0i
480 Pepperdine University	0	0	--	--	--	--	--	--
Total, 1st 480 insts.	12,547,002	11,863,184	11,026,726	10,109,034	9,528,732	8,885,183	8,096,923	7,258,138
481 Pittsburg State U	0	220	195i	170i	145i	120i	95	76i
482 Quinnipiac College	0	0	0	0	0	0	0	0
483 RAND Grad Sch Pol Stu	0	0	0	0	0	0	0	0
484 SUNY Col Potsdam	0	48	74	11	22	27	11	25i
485 SUNY Inst of Tech Utica	0	0e	--	--	--	--	--	--
486 Southwest State U	0	0	--	--	--	--	--	--
487 Talladega College	0	0	0	0	0	350	--	--
488 The Union Institute	0	0	0	0	0	0	0	0
489 The Wright Institute	0	0	0	0	0	0	0	0
490 Trenholm State Tech Col	0	0	0	100	5	5	--	--
Total, 1st 490 insts.	12,547,002	11,863,452	11,026,995	10,109,315	9,528,904	8,885,685	8,097,029	7,258,239
491 U CA Office of the Pres	0	0	0	0	0	0	473	528
492 U WI Platteville	0	0	0	1	0	0	0	1i
493 U of Health Sci (MO)	0	0	0	0	0	0	0	0
494 U of Missouri Sys Admn	0	0	0	20	116	678	756	858
495 US International U	0	0	0	0	88	61	0	0
496 University of Dallas	0	0	0i	0i	0i	0i	0	0i
497 Voorhees College	0	0	0	0	0	211	--	--
498 WV Sch of Osteo Med	0	0	0	14	23	30	22	11
499 Webb Institute	0	8	10i	11i	12i	13i	14	40i
500 Widener U All Campuses	0	0	0i	0i	0i	0i	0	0
Total, 1st 500 insts.	12,547,002	11,863,460	11,027,005	10,109,361	9,529,143	8,886,678	8,098,294	7,259,677

See explanatory information and SOURCE at end of table.

Table B-33. Federally financed R&D expenditures at universities and colleges: fiscal years 1987-94[2]

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
Total, all other sampled insts.	0	92,064	63,023	123,021	107,295	102,955	94,490	83,438
Estimated total non-sampled insts.	114,119	0	0	0	0	0	0	0

[1] Johns Hopkins University includes Applied Physics Laboratory, with $447 million in federally financed R&D expenditures.

[2] These data do not include R&D expenditures at university-associated federally funded research and development centers. See tables B-73 and B-74.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
— = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-34. Non-Federal R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

Page 1 of 4

Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
Total, all institutions	8,420,087	7,984,588	7,716,543	7,346,500	6,648,550	5,986,404	5,270,259	4,809,714
1 Texas A&M University	218,808	200,158	192,472	190,278	179,799	157,122	140,998	144,421
2 U WI Madison	167,315	158,407	152,890	142,837	130,979	116,530	109,034	104,828
3 University of Michigan	166,056	175,917	169,607	157,306	130,122	106,030	89,315	87,332
4 U CA Berkeley	137,104	127,952	135,591	117,777	99,344	85,596	69,807	66,445
5 University of Minnesota	136,826	157,317	151,100	166,584	148,236	125,734	116,326	113,378
6 Pennsylvania State U	134,318	122,507	126,428	121,604	120,270	105,284	82,424	72,641
7 University of Georgia	132,844	120,189	116,317	117,973	112,878	103,156	97,989	89,181
8 University of Arizona	124,243	122,105	116,087	111,908	102,713	93,586	82,155	73,702
9 Cornell University	118,702	115,720	118,981	136,057	128,895	128,749	117,997	109,367
10 U CA Davis	117,429	118,503	117,964	120,703	120,651	107,579	91,220	87,176
Total, 1st 10 insts.	1,453,645	1,418,775	1,397,437	1,383,027	1,273,887	1,129,366	997,265	948,471
11 Ohio State University	117,329	112,391	105,351	106,377	99,691	98,001	85,517	64,691
12 Louisiana St U, All Camp	113,793	106,225	103,203	90,567	87,047	82,243	79,120	70,981
13 U MD College Park	112,297	144,303	136,572	128,566	99,612	90,586	80,166	71,045
14 U TX Austin	111,016	110,032	103,931	123,851	118,610	99,026	82,626	80,536
15 University of IL Urbana	106,673	111,662	122,884	124,632	108,466	96,192	87,760	84,262
16 Rutgers the State U NJ	105,062	105,856	105,464	102,513	97,008	88,678	75,946	67,377
17 NC State U Raleigh	103,799	93,154	92,507	95,712	87,346	85,658	76,030	68,985
18 Iowa State University	99,543	97,764	87,436	91,864	82,227	74,346	63,420	58,669
19 U CA San Francisco	99,141	104,451	93,501	77,764	63,021	59,540	55,542	52,134
20 Georgia Institute of Tech	96,555	77,475	78,968	75,253	73,351	76,616	64,253	57,210
Total, 1st 20 insts.	2,518,853	2,482,088	2,427,254	2,400,126	2,190,266	1,980,252	1,747,645	1,624,361
21 Northwestern University	95,794	84,612	72,734	82,091	70,968	61,481	48,510	39,634
22 Baylor Col of Medicine	94,461	84,629	82,264	82,332	79,329	65,345	45,989	40,345
23 MA Institute of Tech	93,200	98,139	86,481	81,234	77,954	72,017	60,165	57,631
24 Purdue University	90,585	76,078	72,036	68,515	65,915	60,344	54,634	50,829
25 U of Missouri Columbia	89,957	76,581	69,195	69,285	63,759	51,743	46,195	40,962
26 U CA Los Angeles	89,667	88,909	90,211	82,148	82,353	68,826	62,392	58,068
27 Michigan State University	89,430	80,567	75,842	71,603	68,766	69,715	66,549	66,821
28 University of Connecticut	88,454	84,003	78,043	77,638	74,455	63,144	50,677	44,691
29 University of Florida	88,369	71,262	72,599	73,480	75,064	65,039	52,392	54,934
30 Harvard University	88,276e	75,238	78,494	73,925	66,722	66,068	57,426	49,119
Total, 1st 30 insts.	3,427,046	3,302,106	3,205,153	3,162,377	2,915,551	2,623,974	2,292,574	2,127,395
31 U TX MD Anderson Cncr	79,941	86,317	77,629	76,674	62,394	56,911	48,513	43,255
32 VA Polytech Inst & St U	74,823	74,063	79,713	77,390	75,474	65,669	56,184	48,423
33 U of Nebraska Lincoln	72,965	71,029	66,045	60,030	54,912	42,478	35,340	31,554
34 Johns Hopkins U	72,351	71,914	68,846	68,856	69,064	58,211	48,007	34,606
35 Duke University	71,870	66,057	62,936	49,353	34,655	32,054	27,728	21,631
36 U of Tennessee System	71,052	67,084	59,193	64,843	58,000	55,451	50,282	45,609
37 University of Colorado	69,904	54,633	46,372	41,458	38,329	34,575	31,974	29,132
38 U of South Florida	66,276	58,604	50,703	49,370	45,923	34,397	31,555	30,743
39 U CA San Diego	65,735	63,902	62,271	60,971	54,477	45,512	40,694	40,296
40 U of Pennsylvania	65,408	60,236	62,850	53,770	55,643	49,934	44,138	47,149
Total, 1st 40 insts.	4,137,371	3,975,945	3,841,711	3,765,092	3,464,422	3,099,166	2,706,989	2,499,793
41 University of Washington	62,877	66,510	55,674	53,299	41,960	39,259	30,474	41,878
42 University of Oklahoma	60,481	58,721	62,413	53,991	41,774	36,936	33,721	30,897
43 SUNY Buffalo	59,278	47,480	50,800	44,496	42,314	35,838	27,538	19,262
44 Yale University	58,950	57,950	54,224	44,387	35,744	32,304	29,236	28,875
45 U of Southern California	57,540	50,857	53,027	43,365	45,388	43,008	37,394	33,246
46 U of Iowa	57,500	55,328	47,058	43,051	36,732	31,629	30,182	21,931
47 Auburn University	57,391	50,713	51,358	54,634	52,166	38,635	34,494	34,599
48 University of Kentucky	56,738	56,137	52,416	49,501	45,347	42,522	41,279	28,781
49 University of IL Chicago	56,667	55,507	53,783	47,317	41,300	40,041	35,662	30,131
50 Indiana University	54,960	50,500	47,694	40,630	32,036	23,459	21,028	21,130
Total, 1st 50 insts.	4,719,753	4,525,648	4,370,158	4,239,763	3,879,183	3,462,797	3,027,997	2,790,523

See explanatory information and SOURCE at end of table.

Table B-34. Non-Federal R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

Page 2 of 4

Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
51 University of Kansas	54,885	47,396	43,012	39,563	34,358	30,691	26,843	27,662
52 Oregon State University	54,703	52,886	47,834	45,100	40,144	42,243	40,076	36,012
53 Washington University	54,079	49,847	46,476	47,989	45,490	31,590	28,986	25,662
54 U of NC Chapel Hill	52,575	48,237	47,775	39,196	30,645	28,817	24,316	21,225
55 Clemson University	52,439	55,270	58,808	53,642	52,443	44,215	36,227	37,479
56 Wayne State University	51,278	45,260	45,558	39,414	33,967	31,354	27,793	22,408
57 U MD Baltimore Prof Sch	51,139	58,216	52,224	56,481	44,848	39,884	35,685	31,687
58 Oklahoma State University	50,368	52,080	55,854	51,736	47,941	39,539	43,786	37,845
59 New York University	50,189	36,141	35,318	30,210	27,755	23,308	23,126	22,798
60 Stanford University	50,002	52,297	102,293	71,722	43,690	47,344	44,932	36,499
Total, 1st 60 insts.	5,241,410	5,023,278	4,905,310	4,714,816	4,280,464	3,821,782	3,359,757	3,089,800
61 Washington State U	48,653	48,756	46,867	42,987	39,972	32,476	29,958	27,591
62 Emory University	47,608	39,701	31,504	31,354	30,407	18,216	17,228	22,191
63 U TX SW Med Ctr Dallas	46,930	46,315	40,764	36,765	30,954	28,666	22,035	17,525
64 U Med & Dent NJ	46,179	40,886	45,413	42,019	38,604	26,468	20,178	15,233
65 Colorado State University	45,993	46,652	42,660	24,785	23,223	17,779	14,769	13,658
66 University of Virginia	45,851	42,439	41,952	35,673	38,014	30,067	27,090	22,594
67 Kansas State University	44,149	42,980	39,140	37,284	34,660	31,351	28,880	27,317
68 U of Alabama Birmingham	43,016	39,028	35,452	37,000	36,117	32,462	22,661	18,158
69 Mississippi State U	42,283	40,684	36,008	38,584	37,066	35,976	31,449	28,018
70 U Arkansas Main	41,775	43,927	32,347	28,460	26,132	23,887	19,911	19,739
Total, 1st 70 insts.	5,693,847	5,454,646	5,297,417	5,069,727	4,615,613	4,099,130	3,593,926	3,301,824
71 Tulane University	41,531	38,694	38,886	35,068	28,076	21,100	18,892	16,557
72 Princeton University	40,743	41,192	38,236	39,667	39,955	35,738	29,646	21,584
73 SUNY Stony Brook	40,578	39,794	35,298	31,813	26,325	29,729	25,393	14,548
74 University of Pittsburgh	40,327	36,844	36,173	30,390	27,016	30,048	26,147	22,123
75 U TX Med Br Galveston	39,998	37,443	33,391	24,112	18,917	15,565	13,330	7,613
76 University of New Mexico	38,535	33,870	32,830	37,203	32,279	29,036	22,867e	20,668e
77 Utah State University	37,630	31,837	34,872	32,405	27,485	27,495	24,510	19,234
78 U CA Irvine	37,533	36,085	33,944	29,871	25,582	20,314	17,206	13,553
79 U CA Riverside	37,252	39,939	40,369	41,213	39,086	37,629	36,311	36,157
80 University of Cincinnati	37,238	35,118	33,904	33,153	29,495	29,233	24,493	21,760
Total, 1st 80 insts.	6,085,212	5,825,462	5,655,320	5,404,622	4,909,829	4,375,017	3,832,721	3,495,621
81 Florida State University	36,813	24,239	22,529	25,316	30,006	29,747	26,652	25,004
82 U of South Carolina	36,083	28,812	30,617	32,007	26,890	22,825	16,181	15,121
83 Case Western Reserve U	35,970	32,824	35,004	27,809	22,869	17,536	18,225	17,270
84 U of Alaska Fairbanks	35,323	25,180	35,815	33,097	33,675	30,042	26,415e	25,909i
85 Carnegie Mellon U	34,790	39,595	40,723	37,740	35,651	36,556	31,042	29,946
86 Rockefeller University	34,468	37,542	37,270	37,331	38,457	32,753	31,136	28,777
87 Columbia University	33,316	22,014	24,739	31,105	26,499	25,433	21,418	16,886
88 University of Idaho	32,752	28,778	27,539	24,258	21,124	19,672	19,108	15,350
89 U MA Amherst	32,614	32,046	29,582	--	--	--	--	--
90 Arizona State University	31,864	36,110	36,198	37,243	33,259	22,196	20,504	24,754
Total, 1st 90 insts.	6,429,205	6,132,602	5,975,336	5,690,528	5,178,259	4,611,777	4,043,402	3,694,638
91 U TX Hlth Sci Ctr San Ant	31,864	26,772	24,131	18,998	16,232	13,177	12,145	12,007
92 University of Rochester	31,622	30,912	29,579	24,903	23,367	22,948	21,528	21,276
93 CUNY Mt Sinai Sch Med	30,991	25,537	24,708	24,275	20,145	19,623	16,875	15,113
94 University Hawaii Manoa	30,687	32,599	32,574	33,309	33,860	30,159	25,718	22,873
95 University of Miami	29,912	29,403	22,309	27,132	26,200	27,197	21,812	27,106
96 Temple University	29,168	27,138	27,052	26,048	23,285	20,250	20,804	17,661
97 Virginia Commonwealth U	28,674	28,320	23,298	20,634	21,124	17,042	11,801	11,234
98 Texas Tech University	28,095	27,222	25,748	25,671	24,775	22,987	17,754	17,301
99 U of Central Florida	28,086	21,395	18,478	31,529	21,264	19,838	7,831	6,870i
100 Georgetown University	27,669	25,322	22,278	18,857	14,774	16,246	14,117	11,504
Total, 1st 100 insts.	6,725,973	6,407,222	6,225,491	5,941,884	5,403,285	4,821,244	4,213,787	3,857,583

See explanatory information and SOURCE at end of table.

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Table B-34. Non-Federal R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
101 U MA Worcester	26,867	26,782	17,929	—	—	—	—	—
102 SUNY Albany	26,611	10,542	9,868	8,376	7,537	9,069	6,030	5,796
103 North Dakota State U	26,100	26,215	25,789	24,835	6,051	5,141	4,428	16,638
104 Rush University	24,905	21,252	17,054	20,349	15,201	14,159	13,274	8,519
105 University of Delaware	24,484	26,457	27,341	24,643	22,531	20,111	18,315	18,019
106 Tufts University	24,077	21,894e	18,779e	8,635	8,719	9,653	12,272	9,349
107 West Virginia University	23,982	23,179	24,742	30,104	24,985	21,907	14,377	13,577
108 U of Nevada Reno	23,377	21,467	23,461	18,445	9,527	9,494	7,878	7,138
109 University of Utah	22,508	22,026	29,100	25,852	26,721	21,521	18,406	13,968
110 Yeshiva University	22,163	17,865	19,044	18,890	18,902	16,272	16,560	14,005
Total, 1st 110 insts.	6,971,047	6,624,901	6,438,598	6,122,013	5,543,459	4,948,571	4,325,327	3,964,592
111 U of NE Med Ctr Omaha	21,741	21,538	21,824	17,340	8,766	8,719	6,919	5,249
112 New Mexico State U	20,654	21,153	21,028	21,214	16,600	15,270	17,520	20,768
113 Sthrn IL U Carbondale	20,566	18,939	20,712	21,248	17,838	16,786	13,494	12,609
114 Montana State University	20,411	18,815	20,976	20,169	18,596	17,187	14,517	14,366i
115 University of Houston	20,301	20,688	23,076	22,152	20,403	17,871	12,651	13,338
116 Oregon Health Sciences U	20,246	17,947	15,765	12,764	14,179	10,935	11,269	10,683
117 U TX Hlth Sci Ctr Houston	19,611	20,122	18,784	21,118	16,690	17,360	15,687	10,431
118 University of Chicago	19,372	15,947	20,941	19,606	21,628	18,970	17,574	15,990
119 Syracuse University	19,341	15,625	17,430	16,414	14,887	15,176	11,266	12,361
120 Medical Col of Georgia	18,899	17,222	13,679	4,001	4,007	3,971	2,304	2,348
Total, 1st 120 insts.	7,172,189	6,812,897	6,632,813	6,298,039	5,697,053	5,090,816	4,448,528	4,082,735
121 University of Wyoming	18,705	17,981	16,883	10,227	10,624	9,506	9,293	8,615
122 U of New Hampshire	18,675	15,920	12,153	11,075	11,539	9,126	8,747	6,932
123 U CA Santa Cruz	18,655	16,065	16,176	15,815	12,492	11,108	9,900	10,790
124 SUNY Col Env Sci Frstry	18,488	18,679	16,029	16,923	16,698	15,338	11,248	10,481
125 Brown University	18,282	18,301	17,729	13,932	9,844	9,058	6,406	6,086
126 Medical Col of Wisconsin	18,145	17,428	15,911	15,384	13,028	13,519	13,428	14,667
127 University of Vermont	18,080	18,309	16,785	15,681	14,607	14,208	11,276	9,258
128 U of Maine	18,007	15,920	14,238	17,020	14,559	11,686	10,293	9,165
129 Boston University	17,953	19,565	17,024	14,715	13,192	9,923	9,587	8,893
130 Med U of South Carolina	17,742	21,072	14,726	11,510	12,218	11,470	9,993	8,861
Total, 1st 130 insts.	7,354,921	6,992,137	6,790,467	6,440,321	5,825,854	5,205,758	4,548,699	4,176,483
131 Vanderbilt University	17,666	12,498	17,021	9,738	8,315	9,067	15,945	12,246
132 NJ Inst of Technology	17,411	15,506	15,348	12,383	12,494	10,320	7,242	9,571
133 San Diego St University	17,041	15,631	15,004	11,826	7,877	7,076	6,682	5,587
134 Dartmouth College	16,083	15,828	14,877	15,067	13,602	11,230	9,834	9,363
135 Wake Forest University	15,859	15,785	12,414	10,829	9,472	8,645	7,542	4,824
136 California Inst of Tech	15,444	11,551	12,535	14,706	15,153	14,564	13,780	15,479
137 Rensselaer Polytech Inst	15,101	22,026	26,456	26,734	24,071	19,662	18,191	10,969
138 U MD Center for EES	14,365	13,642	14,236	13,348	13,273	11,222	10,140	9,400
139 The Medical Col of PA	14,343	8,006	7,921	9,685	6,939	9,028	6,257	3,632
140 U CA Santa Barbara	14,283	14,718	13,230	12,946	11,877	10,840	10,393	9,848
Total, 1st 140 insts.	7,512,517	7,137,328	6,939,509	6,577,583	5,948,927	5,317,412	4,654,705	4,267,402
141 George Washington U	14,050	13,479	11,177	6,076	5,555	5,064	3,634	4,178
142 Lehigh University	13,825	14,831	14,396	16,042	16,013	16,079	16,792	15,214
143 Thomas Jefferson U	13,717	12,813	12,468	9,966	8,518	8,094	7,465	6,287
144 U of Rhode Island	13,606	13,333	15,362e	14,862	15,335	14,279	12,973	8,080
145 U PR Mayaguez	13,598	14,669	16,121	16,170i	16,218	15,229	14,212	15,759
146 NM Inst Mining & Tech	13,363	18,667	17,526	17,413i	17,301	15,106	14,865	14,786
147 Brandeis University	13,250	14,388	13,429	12,557	12,062	11,516	8,023	6,954i
148 Loyola U of Chicago	13,243	11,002	12,028	7,999	6,057	5,252	3,880	3,319
149 U of Missouri Rolla	13,234	11,897	10,800	10,072	10,422	14,233	15,153	10,451
150 U TX Arlington	12,816	10,839	10,600	10,146	3,934	5,658	5,415	4,093
Total, 1st 150 insts.	7,647,219	7,273,246	7,073,416	6,698,886	6,060,342	5,427,922	4,757,117	4,356,523

See explanatory information and SOURCE at end of table.

Table B-34. Non-Federal R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
151 University of Akron	12,767	13,229	10,582	9,994	7,367	7,203	4,915	5,405
152 Wright State University	11,431	10,508	8,746	6,599	6,025	5,329	4,539	3,565
153 U WI Milwaukee	11,203	10,790	10,926	10,057	8,924	7,981	7,762	7,140
154 University of Louisville	11,201	10,572	10,133	10,102	7,284	8,513	17,507	18,449
155 SUNY Hlth Sci Ctr Brklyn	11,078	9,729	8,275	14,875	8,299	8,971	7,620	6,514
156 Michigan Tech University	10,802	8,919	9,937	12,797	9,992	9,976	8,095	7,899
157 SUNY Binghamton	10,703	8,755	8,232	6,740	6,978	6,356	6,194	5,768
158 Ohio University	10,589	10,284	9,955	8,257	8,842	7,739	7,323	5,720
159 The University of Alabama	10,478	14,566	15,696	15,821	14,547	11,853	9,460	8,223e
160 Oregon Grad Inst Sci Tech	10,401	8,697	5,194	4,198	2,425	2,243	1,957	1,929
Total, 1st 160 insts.	7,757,872	7,379,295	7,171,092	6,798,326	6,141,025	5,504,086	4,832,489	4,427,135
161 Georgia State University	10,329	6,307	6,005	5,755	5,321	4,493	3,503	3,152
162 Col of William & Mary	10,017	11,458	10,681	11,225	11,332	10,045	3,089	2,674
163 U of Alabama Huntsville	9,899	9,170	7,585	7,136	8,210	8,185	6,630	3,610
164 Drexel University	9,880	8,979	13,315	12,146	13,318	11,612	9,445	7,933
165 U of Nevada Las Vegas	9,488	8,788	3,294	1,923	2,179i	2,437i	2,695	2,193i
166 U Arkansas Medical Sci	9,352	4,722	6,247	6,443	5,244	5,576	4,005	3,533
167 Memphis State University	9,278	8,236	8,583	9,046	9,407	7,593	6,554	5,864
168 Unif Svcs U of Hlth Sci	9,210	8,527	7,498i	6,468i	5,438i	4,408i	3,378	0
169 U Mississippi, All Camp	9,164	8,817	7,264	7,611	7,098	6,251	5,808	5,130
170 U of Southwestern LA	9,101	10,189	9,808	9,303	7,445	5,999	4,229	4,428
Total, 1st 170 insts.	7,853,590	7,464,488	7,251,372	6,875,582	6,216,017	5,570,685	4,881,825	4,465,652
171 Rochester Inst of Tech	9,050	4,770	4,002i	3,233i	2,464i	1,695i	926	743i
172 University of Oregon	8,966	9,273	9,240	6,840	6,195	5,190	3,994	4,032
173 U MD Biotechnology Inst	8,760	--	--	--	--	--	--	--
174 U MA Boston	8,580	7,612	5,955	--	--	--	--	--
175 South Dakota State U	8,372	9,017	7,941	7,409	5,845	5,218	5,279	5,257
176 University of Montana	8,233	7,866	5,153	4,179	3,864	3,711	3,917e	3,760
177 Tennessee Tech U	8,149	8,212	8,338	8,939	8,345	6,796	6,752	6,259
178 U MA Lowell	7,874	8,333	8,008	5,862	6,629	5,268	5,295	3,277
179 University of Dayton	7,774	6,719	6,082	6,793	7,133	5,334	5,382	4,735
180 Med Col Hampton Roads	7,711	6,065	4,272	4,019	2,714	1,238	1,323	1,709
Total, 1st 180 insts.	7,937,059	7,532,355	7,310,363	6,922,856	6,259,206	5,605,135	4,914,693	4,495,424
181 Rice University	7,637	8,387	8,068	7,739	6,270	5,223	4,551	4,143i
182 Inst Paper Sci and Tech	7,366	7,033	6,157	6,479	4,796	4,849	4,733	4,308
183 U TX Dallas	7,268	5,340	5,319	5,749	6,187	4,453	3,827	2,827
184 University of North Texas	7,252	6,749	8,769	8,638	7,767	6,308	4,210	2,702
185 Woods Hole Oceanograph	7,126	7,973	8,616	9,825e	9,391	10,548	9,300	5,822
186 Old Dominion University	7,023	7,047	4,575	3,464	3,442	2,932	1,918	2,128
187 U of Missouri Kansas City	6,662	6,009	5,470	5,177	5,543	5,535	6,145	3,978
188 University of Notre Dame	6,475	7,330	7,621	7,715	6,506	6,176	4,266	4,010
189 Western Michigan U	6,446	6,247	4,763	5,166	3,672	2,615i	1,558	1,040
190 CUNY Col Staten Island	6,393	504	621	506	775	592	496	454i
Total, 1st 190 insts.	8,006,707	7,594,974	7,370,342	6,983,314	6,313,555	5,654,366	4,955,697	4,526,836
191 George Mason University	6,192	5,332	3,491	4,125	5,517	3,049	2,354	1,797e
192 Desert Research Institute	6,187	5,673	9,071	8,153	8,085	7,037	6,710	6,360
193 Cleveland State U	5,950	4,616	5,897	5,677	5,004	4,810	5,287	4,878
194 Stevens Inst of Tech	5,816	3,452	9,145	5,187	3,186	2,441	3,588	4,815
195 U PR Med Sci Campus	5,792	4,847	3,677	2,404	927	1,293	1,299	1,504
196 Brigham Young University	5,733	5,620	6,363	5,600	6,251	6,759	5,307	6,321
197 Wichita State University	5,731	4,092	3,710	3,414	2,155	1,522	1,530	1,566
198 Colorado School of Mines	5,719	6,594	6,435	6,484	5,633	4,929	3,835	3,369
199 Kent State University	5,307	5,712	5,849	3,298	2,516	2,921	2,059	1,580
200 CUNY City College	5,246	5,616	4,279	4,231	2,419	2,719	2,321	1,527
Total, 1st 200 insts.	8,064,380	7,646,528	7,428,259	7,031,887	6,355,248	5,691,846	4,989,987	4,560,553
Total, all other sampled insts.	266,139	338,060	288,284	314,613	293,302	294,558	280,272	249,161
Estimated total non-sampled insts.	89,568	0	0	0	0	0	0	0

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

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Table B-35. R&D expenditures at universities and colleges, by source of funds: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institutional funds	Other
Total, all institutions	21,081,209	12,661,121	1,561,687	1,429,563	3,838,338	1,590,499
1 Johns Hopkins U	784,043	711,692	1,560	10,418	28,027	32,346
2 University of Michigan	430,778	264,722	5,682	26,732	97,115	36,527
3 U WI Madison	392,718	225,403	61,099	13,729	51,534	40,953
4 MA Institute of Tech	363,918	270,718	1,728	55,500	8,724	27,248
5 Texas A&M University	355,750	136,942	82,353	28,576	100,496	7,383
6 University of Washington	343,910	281,033	7,177	33,199	16,366	6,135
7 U CA San Diego	331,901	266,166	10,616	9,764	22,552	22,803
8 Stanford University	318,561	268,559	1,006	14,714	11,586	22,696
9 University of Minnesota	317,865	181,039	45,786	23,726	46,531	20,783
10 Cornell University	312,683	193,981	8,107	17,199	66,177	27,219
Total, 1st 10 insts.	3,952,127	2,800,255	225,114	233,557	449,108	244,093
11 U CA San Francisco	312,393	213,252	18,340	10,977	35,585	34,239
12 Pennsylvania State U	302,997	168,679	8,959	45,408	79,951	0
13 U CA Berkeley	289,632	152,528	38,655	12,547	68,133	17,769
14 U CA Los Angeles	279,869	190,202	4,351	13,394	37,157	34,765
15 Harvard University	278,459e	190,183	251	10,228	15,779e	62,018
16 University of Arizona	269,939	145,696	5,371	15,053	87,465	16,354
17 U TX Austin	260,602	149,586	14,788	4,268	66,594	25,366
18 U of Pennsylvania	251,461	186,053	2,796	12,107	22,064	28,441
19 University of IL Urbana	245,407	138,734	28,490	13,527	55,170	9,486
20 Columbia University	236,417	203,101	1,569	1,632	6,300	23,815
Total, 1st 20 insts.	6,679,303	4,538,269	348,684	372,698	923,306	496,346
21 Ohio State University	230,515	113,186	30,692	14,883	34,858	36,896
22 Yale University	230,375	171,425	2,309	11,713	19,306	25,622
23 U CA Davis	230,147	112,718	18,053	7,423	75,982	15,971
24 University of Colorado	228,067	158,163	3,604	13,312	24,110	28,878
25 Duke University	220,220	148,350	4,587	30,241	14,279	22,763
26 U of Southern California	207,275	149,735	8,960	14,502	34,078	0
27 U of NC Chapel Hill	201,622	149,047	23,082	2,379	27,114	0
28 U MD College Park	198,348	86,051	59,248	18,433	34,616	0
29 Georgia Institute of Tech	193,630	97,075	3,307	27,832	65,416	0
30 University of Pittsburgh	192,465	152,138	2,267	11,500	14,482	12,078
Total, 1st 30 insts.	8,811,967	5,876,157	504,793	524,916	1,267,547	638,554
31 Washington University	192,378	138,299	3,667	20,629	12,048	17,735
32 University of Georgia	187,849	55,005	37,283	8,773	85,505	1,283
33 Baylor Col of Medicine	186,865	92,404	4,021	11,919	25,662	52,859
34 Northwestern University	179,478	83,684	3,138	9,203	66,060	17,393
35 NC State U Raleigh	173,407	69,608	61,700	22,101	18,289	1,709
36 Rutgers the State U NJ	173,211	68,149	24,556	7,796	63,080	9,630
37 Purdue University	172,733	82,148	16,945	21,639	51,681	320
38 University of Florida	167,999	79,630	11,288	12,755	54,332	9,994
39 University of Rochester	167,485	135,863	7,288	10,261	3,655	10,418
40 Louisiana St U, All Camp	165,857	52,064	59,379	9,037	33,728	11,649
Total, 1st 40 insts.	10,579,229	6,733,011	734,058	659,029	1,681,587	771,544
41 Michigan State University	163,285	73,855	25,734	6,271	43,923	13,502
42 U of Iowa	157,036	99,536	4,180	10,205	33,182	9,933
43 Iowa State University	155,982	56,439	42,811	8,185	43,601	4,946
44 U of Tennessee System	153,340	82,288	25,674	10,699	24,517	10,162
45 VA Polytech Inst & St U	148,313	73,490	33,147	12,580	25,593	3,503
46 U of Alabama Birmingham	141,735	98,719	3,283	14,772	10,723	14,238
47 SUNY Buffalo	141,092	81,814	3,143	8,143	16,334	31,658
48 New York University	139,202	89,013	1,381	5,929	17,099	25,780
49 University of Connecticut	136,740	48,286	9,544	7,651	63,448	7,811
50 Indiana University	136,617	81,657	1,646	5,689	29,657	17,968
Total, 1st 50 insts.	12,052,571	7,518,108	884,601	749,153	1,989,664	911,045

See explanatory information and SOURCE at end of table.

Table B-35. R&D expenditures at universities and colleges, by source of funds: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institutional funds	Other
51 Emory University	136,343	88,735	3,025	8,966	19,457	16,160
52 Case Western Reserve U	133,272	97,302	3,513	5,708	12,468	14,281
53 University of Virginia	131,350	85,499	5,588	14,826	13,454	11,983
54 California Inst of Tech	127,946	112,502	629	4,947	7,703	2,165
55 Carnegie Mellon U	122,580	87,790	7,042	14,112	4,769	8,867
56 U TX MD Anderson Cncr	122,357	42,416	0	0	52,929	27,012
57 University of Chicago	121,902	102,530	388	1,324	6,498	11,162
58 University of Miami	121,475	91,563	2,638	11,140	5,391	10,743
59 U of Missouri Columbia	121,256	31,299	14,438	10,299	57,415	7,805
60 Oregon State University	119,772	65,069	26,877	5,110	13,862	8,854
Total, 1st 60 insts.	13,310,824	8,322,813	948,739	825,585	2,183,610	1,030,077
61 U TX SW Med Ctr Dallas	118,398	71,468	837	13,092	5,637	27,364
62 University of IL Chicago	113,741	57,074	3,275	5,061	33,174	15,157
63 SUNY Stony Brook	113,251	72,673	1,427	5,012	29,120	5,019
64 Colorado State University	112,457	66,464	4,511	11,793	23,355	6,334
65 U MD Baltimore Prof Sch	110,866	59,727	22,869	15,411	5,706	7,153
66 Vanderbilt University	110,105	92,439	197	3,033	8,020	6,416
67 University of Kentucky	105,539	48,801	6,135	11,790	33,999	4,814
68 U CA Irvine	104,778	67,245	4,938	6,243	14,242	12,110
69 University of Utah	103,771	81,263	268	4,087	12,023	6,130
70 U of Nebraska Lincoln	102,746	29,781	36,088	3,680	27,656	5,541
Total, 1st 70 insts.	14,406,476	8,969,748	1,029,284	904,787	2,376,542	1,126,115
71 Princeton University	99,287	58,544	1,033	8,089	22,189	9,432
72 University of Oklahoma	95,747	35,266	10,319	4,887	32,202	13,073
73 University of Kansas	95,701	40,816	5,914	4,320	39,065	5,586
74 Wayne State University	94,632	43,354	6,698	7,988	27,684	8,908
75 Washington State U	94,166	45,513	4,239	3,029	32,250	9,135
76 University of Cincinnati	93,599	56,361	3,269	10,405	18,158	5,406
77 Yeshiva University	92,881	70,718	0	1,750	11,751	8,662
78 Boston University	90,504	72,551	785	8,695	0	8,473
79 University of New Mexico	90,315	51,780	2,529	4,038	19,685	12,283
80 U Med & Dent NJ	86,866	40,687	5,393	8,984	22,781	9,021
Total, 1st 80 insts.	15,340,174	9,485,338	1,069,463	966,972	2,602,307	1,216,094
81 U of South Florida	86,186	19,910	7,415	6,338	42,932	9,591
82 CUNY Mt Sinai Sch Med	86,179	55,188	2,449	5,934	11,202	11,406
83 Tulane University	83,885	42,354	2,487	10,018	23,637	5,389
84 Utah State University	83,758	46,128	13,769	2,265	19,841	1,755
85 U TX Hlth Sci Ctr San Ant	83,535	51,671	8,274	7,300	11,733	4,557
86 Georgetown University	82,661	54,992	1	6,773	14,095	6,800
87 Woods Hole Oceanograph	81,345	74,219	501	332	1,073	5,220
88 New Mexico State U	80,286	59,632	10,088	3,516	5,650	1,400
89 Virginia Commonwealth U	76,597	47,923	2,515	7,089	16,577	2,493
90 Florida State University	76,588	39,775	3,719	1,893	27,766	3,435
Total, 1st 90 insts.	16,161,194	9,977,130	1,120,681	1,018,430	2,776,813	1,268,140
91 Clemson University	76,572	24,133	13,889	5,410	28,517	4,623
92 Mississippi State U	76,201	33,918	17,601	5,913	8,869	9,900
93 U of Alaska Fairbanks	76,093	40,770	4,625	4,441	26,253	4
94 Auburn University	75,738	18,347	24,432	7,940	19,164	5,855
95 Rockefeller University	74,458	39,990	18	4,031	16,922	13,497
96 U of South Carolina	74,001	37,918	1,415	8,046	23,555	3,067
97 Tufts University	73,749	49,672	0	5,131	12,675	6,271
98 U CA Santa Barbara	73,619	59,336	1,291	2,711	6,683	3,598
99 U TX Med Br Galveston	72,773	32,775	8,785	6,115	16,841	8,257
100 Oklahoma State University	70,808	20,440	7,909	3,381	35,259	3,819
Total, 1st 100 insts.	16,905,206	10,334,429	1,200,646	1,071,549	2,971,551	1,327,031

See explanatory information and SOURCE at end of table.

Table B-35. R&D expenditures at universities and colleges, by source of funds: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institutional funds	Other
101 University Hawaii Manoa	70,079	39,392	25,204	434	3,290	1,759
102 U TX Hlth Sci Ctr Houston	66,432	46,821	748	6,313	5,799	6,751
103 Kansas State University	65,696	21,547	27,101	3,111	12,187	1,750
104 U MA Amherst	65,344	32,730	5,060	4,868	16,715	5,971
105 Oregon Health Sciences U	63,875	43,629	2	945	14,942	4,357
106 Arizona State University	62,563	30,699	997	5,780	23,137	1,950
107 U MA Worcester	61,790	34,923	220	3,776	18,055	4,816
108 U CA Riverside	60,995	23,743	2,624	1,103	30,035	3,490
109 SUNY Albany	59,122	32,511	6,463	1,863	5,831	12,454
110 West Virginia University	58,604	34,622	1,936	4,058	14,499	3,489
Total, 1st 110 insts.	17,539,706	10,675,046	1,271,001	1,103,800	3,116,041	1,373,818
111 Dartmouth College	57,845	41,762	937	2,833	6,815	5,498
112 U Arkansas Main	57,815	16,040	22,672	5,605	11,531	1,967
113 Thomas Jefferson U	56,932	43,215	0	7,455	34	6,228
114 Temple University	56,308	27,140	221	6,011	19,935	3,001
115 Brown University	55,146	36,864	68	1,467	14,774	1,973
116 Wake Forest University	52,581	36,722	375	9,064	3,778	2,642
117 University of Vermont	51,775	33,695	2,572	4,878	7,496	3,134
118 University of Delaware	50,734	26,250	2,180	4,117	13,946	4,241
119 Medical Col of Wisconsin	49,604	31,459	450	4,164	4,157	9,374
120 University of Idaho	49,338	16,586	8,825	7,495	16,235	197
Total, 1st 120 insts.	18,077,784	10,984,779	1,309,301	1,156,889	3,214,742	1,412,073
121 University of Dayton	47,768	39,994	290	5,313	2,057	114
122 U of Rhode Island	46,631	33,025	3,086	1,364	9,155	1
123 Med U of South Carolina	46,249	28,507	0	5,534	1,977	10,231
124 U of New Hampshire	43,707	25,032	1,953	1,476	10,044	5,202
125 University of Houston	43,131	22,830	10,386	1,183	6,099	2,633
126 U CA Santa Cruz	42,457	23,802	2,064	893	12,026	3,672
127 U of Nevada Reno	42,176	18,799	857	1,674	20,096	750
128 U of Central Florida	41,362	13,276	3,315	5,369	19,402	0
129 Rush University	39,736	14,831	436	4,993	10,656	8,820
130 Texas Tech University	39,455	11,360	10,860	5,573	9,273	2,389
Total, 1st 130 insts.	18,510,456	11,216,235	1,342,548	1,190,261	3,315,527	1,445,885
131 Syracuse University	38,650	19,309	4,454	4,522	6,465	3,900
132 George Washington U	38,429	24,379	426	2,676	3,142	7,806
133 Rensselaer Polytech Inst	37,191	22,090	3,070	5,925	4,890	1,216
134 North Dakota State U	36,977	10,877	1,450	1,261	22,105	1,284
135 Loyola U of Chicago	36,830	23,587	709	3,795	5,011	3,728
136 Montana State University	36,149	15,738	8,632	3,139	8,640	0
137 Brandeis University	34,835	21,585	176	0	3,990	9,084
138 U of NE Med Ctr Omaha	33,997	12,256	4,972	3,639	11,078	2,052
139 University of Wyoming	33,820	15,115	3,820	1,185	12,025	1,675
140 Rice University	33,309	25,672	2,427	3,837	0	1,373
Total, 1st 140 insts.	18,870,643	11,406,843	1,372,684	1,220,240	3,392,873	1,478,003
141 U of Alabama Huntsville	31,482	21,583	1,262	2,948	5,689	0
142 University of Oregon	31,170	22,204	563	509	5,794	2,100
143 Sthrn IL U Carbondale	30,497	9,931	5,325	2,347	11,168	1,726
144 The Medical Col of PA	30,473	16,130	4,038	3,831	5,589	885
145 NJ Inst of Technology	29,983	12,572	6,008	3,288	7,011	1,104
146 U of Maine	29,393	11,386	2,290	4,406	10,907	404
147 San Diego St University	29,309	12,268	7,696	1,272	5,665	2,408
148 Lehigh University	29,188	15,363	1,264	7,303	4,490	768
149 Medical Col of Georgia	28,020	9,121	329	3,575	13,334	1,661
150 SUNY Hlth Sci Ctr Brklyn	27,773	16,695	101	4,306	4,300	2,371
Total, 1st 150 insts.	19,167,931	11,554,096	1,401,560	1,254,025	3,466,820	1,491,430

See explanatory information and SOURCE at end of table

Table B-35. R&D expenditures at universities and colleges, by source of funds: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institutional funds	Other
151 Unif Svcs U of Hlth Sci	27,334	18,124	0	0	9,210	0
152 US Naval Postgrad School	26,538	26,225	62	59	0	192
153 U Mississippi, All Camp	25,000	15,836	2,596	1,998	3,251	1,319
154 Florida A&M University	24,691	20,730	2,360	1,601	0	0
155 U PR Mayaguez	22,967	9,369	7,750	1,241	4,607	0
156 University of Notre Dame	22,833	16,358	952	3,710	1,813	0
157 U Arkansas Medical Sci	22,762	13,410	220	2,158	5,697	1,277
158 The University of Alabama	21,960	11,482	64	2,332	8,082	0
159 SUNY Col Env Sci Frstry	21,839	3,351	928	2,044	14,839	677
160 Michigan Tech University	21,786	10,984	1,162	2,885	6,755	0
Total, 1st 160 insts.	19,405,641	11,699,965	1,417,654	1,272,053	3,521,074	1,494,895
161 Desert Research Institute	21,459	15,272	1,844	3,798	500	45
162 Wright State University	21,055	9,624	2,879	1,429	5,573	1,550
163 NM Inst Mining & Tech	20,945	7,582	1,956	6,057	5,226	124
164 Drexel University	20,886	11,006	1,127	5,764	2,989	0
165 Oregon Grad Inst Sci Tech	20,859	10,458	704	2,973	2,070	4,654
166 St Louis University	20,844	18,120	243	1,545	534	402
167 University of Louisville	20,475	9,274	62	4,180	6,959	0
168 Col of William & Mary	20,443	10,426	1,447	831	7,283	456
169 Howard University	19,836	15,196	908	1,741	1,990	1
170 U MD Center for EES	19,817	5,452	3,418	114	9,150	1,683
Total, 1st 170 insts.	19,612,260	11,812,375	1,432,242	1,300,485	3,563,348	1,503,810
171 U of Missouri Rolla	19,706	6,472	283	1,122	9,195	2,634
172 U WI Milwaukee	19,180	7,977	6,531	363	2,771	1,538
173 Northeastern University	19,104	16,037	291	2,002	163	611
174 U of Nevada Las Vegas	19,031	9,543	1,869	1,582	5,552	485
175 George Mason University	18,871	12,679	871	508	2,594	2,219
176 CUNY City College	18,831	13,585	1,241	1,211	2,794	0
177 University North Dakota	18,732	16,660	43	728	1,119	182
178 New York Medical College	18,725	14,913	154	1,807	0	1,851
179 Med Col Hampton Roads	17,873	10,162	0	4,064	58	3,589
180 U PR Med Sci Campus	17,765	11,973	564	0	4,042	1,186
Total, 1st 180 insts.	19,800,078	11,932,376	1,444,089	1,313,872	3,591,636	1,518,105
181 U TX Arlington	17,453	4,637	5,020	3,275	4,521	0
182 Georgia State University	17,100	6,771	580	731	8,403	615
183 University of Montana	16,908	8,675	636	826	6,262	509
184 University of Akron	16,783	4,016	2,331	4,214	5,869	353
185 Ohio University	16,425	5,836	2,277	2,690	5,129	493
186 SUNY Binghamton	15,803	5,100	1,433	1,502	5,502	2,266
187 U MA Lowell	15,155	7,281	499	3,695	2,568	1,112
188 Old Dominion University	14,911	7,888	3,422	1,061	2,540	0
189 U MD Biotechnology Inst	14,839	6,079	197	925	7,425	213
190 Med Col PA Hahnemann U	14,745	10,194	135	1,725	2,105	586
Total, 1st 190 insts.	19,960,200	11,998,853	1,460,619	1,334,516	3,641,960	1,524,252
191 U TX Dallas	14,492	7,224	2,290	1,220	3,158	600
192 Mercer University	14,201	11,115	0	849	2,237	0
193 South Dakota State U	14,083	5,711	6,143	416	1,245	568
194 U of South Alabama	13,917	8,838	648	2,063	2,368	0
195 Colorado School of Mines	13,880	8,161	511	5,087	121	0
196 Brigham Young University	13,859	8,126	786	1,712	3,072	163
197 Western Illinois U	13,780	8,983	1,594	250	1,712	1,241
198 NC A&T State University	13,637	10,132	1,071	338	863	1,233
199 Florida International U	13,520	10,936	1,208	413	564	399
200 Stevens Inst of Tech	13,460	7,644	2,175	1,884	1,757	0
Total, 1st 200 insts.	20,099,029	12,085,723	1,477,045	1,348,748	3,659,057	1,528,456
Total, all other sampled insts.	778,492	461,279	71,371	68,113	130,353	47,376
Estimated total non-sampled insts.	203,688	114,119	13,271	12,702	48,928	14,667

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-36. R&D expenditures at public universities and colleges, by source of funds: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institutional funds	Other
Total, all institutions	14,155,210	7,639,018	1,445,593	956,048	3,169,149	945,401
1 University of Michigan	430,778	264,722	5,682	26,732	97,115	36,527
2 U WI Madison	392,718	225,403	61,099	13,729	51,534	40,953
3 Texas A&M University	355,750	136,942	82,353	28,576	100,496	7,383
4 University of Washington	343,910	281,033	7,177	33,199	16,366	6,135
5 U CA San Diego	331,901	266,166	10,616	9,764	22,552	22,803
6 University of Minnesota	317,865	181,039	45,786	23,726	46,531	20,783
7 U CA San Francisco	312,393	213,252	18,340	10,977	35,585	34,239
8 Pennsylvania State U	302,997	168,679	8,959	45,408	79,951	0
9 U CA Berkeley	289,632	152,528	38,655	12,547	68,133	17,769
10 U CA Los Angeles	279,869	190,202	4,351	13,394	37,157	34,765
Total, 1st 10 insts.	3,357,813	2,079,966	283,018	218,052	555,420	221,357
11 University of Arizona	269,939	145,696	5,371	15,053	87,465	16,354
12 U TX Austin	260,602	149,586	14,788	4,268	66,594	25,366
13 University of IL Urbana	245,407	138,734	28,490	13,527	55,170	9,486
14 Ohio State University	230,515	113,186	30,692	14,883	34,858	36,896
15 U CA Davis	230,147	112,718	18,053	7,423	75,982	15,971
16 University of Colorado	228,067	158,163	3,604	13,312	24,110	28,878
17 U of NC Chapel Hill	201,622	149,047	23,082	2,379	27,114	0
18 U MD College Park	198,348	86,051	59,248	18,433	34,616	0
19 Georgia Institute of Tech	193,630	97,075	3,307	27,832	65,416	0
20 University of Pittsburgh	192,465	152,138	2,267	11,500	14,482	12,078
Total, 1st 20 insts.	5,608,555	3,382,360	471,920	346,662	1,041,227	366,386
21 University of Georgia	187,849	55,005	37,283	8,773	85,505	1,283
22 NC State U Raleigh	173,407	69,608	61,700	22,101	18,289	1,709
23 Rutgers the State U NJ	173,211	68,149	24,556	7,796	63,080	9,630
24 Purdue University	172,733	82,148	16,945	21,639	51,681	320
25 University of Florida	167,999	79,630	11,288	12,755	54,332	9,994
26 Louisiana St U, All Camp	165,857	52,064	59,379	9,037	33,728	11,649
27 Michigan State University	163,285	73,855	25,734	6,271	43,923	13,502
28 U of Iowa	157,036	99,536	4,180	10,205	33,182	9,933
29 Iowa State University	155,982	56,439	42,811	8,185	43,601	4,946
30 U of Tennessee System	153,340	82,288	25,674	10,699	24,517	10,162
Total, 1st 30 insts.	7,279,254	4,101,082	781,470	464,123	1,493,065	439,514
31 VA Polytech Inst & St U	148,313	73,490	33,147	12,580	25,593	3,503
32 U of Alabama Birmingham	141,735	98,719	3,283	14,772	10,723	14,238
33 SUNY Buffalo	141,092	81,814	3,143	8,143	16,334	31,658
34 University of Connecticut	136,740	48,286	9,544	7,651	63,448	7,811
35 Indiana University	136,617	81,657	1,646	5,689	29,657	17,968
36 University of Virginia	131,350	85,499	5,588	14,826	13,454	11,983
37 U TX MD Anderson Cncr	122,357	42,416	0	0	52,929	27,012
38 U of Missouri Columbia	121,256	31,299	14,438	10,299	57,415	7,805
39 Oregon State University	119,772	65,069	26,877	5,110	13,862	8,854
40 U TX SW Med Ctr Dallas	118,398	71,468	837	13,092	5,637	27,364
Total, 1st 40 insts.	8,596,884	4,780,799	879,973	556,285	1,782,117	597,710
41 University of IL Chicago	113,741	57,074	3,275	5,061	33,174	15,157
42 SUNY Stony Brook	113,251	72,673	1,427	5,012	29,120	5,019
43 Colorado State University	112,457	66,464	4,511	11,793	23,355	6,334
44 U MD Baltimore Prof Sch	110,866	59,727	22,869	15,411	5,706	7,153
45 University of Kentucky	105,539	48,801	6,135	11,790	33,999	4,814
46 U CA Irvine	104,778	67,245	4,938	6,243	14,242	12,110
47 University of Utah	103,771	81,263	268	4,087	12,023	6,130
48 U of Nebraska Lincoln	102,746	29,781	36,088	3,680	27,656	5,541
49 University of Oklahoma	95,747	35,266	10,319	4,887	32,202	13,073
50 University of Kansas	95,701	40,816	5,914	4,320	39,065	5,586
Total, 1st 50 insts.	9,655,481	5,339,909	975,717	628,569	2,032,659	678,627

See explanatory information and SOURCE at end of table.

Table B-36. R&D expenditures at public universities and colleges, by source of funds: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Federal Govt	State & local govts	Industry	Institutional funds	Other
51 Wayne State University	94,632	43,354	6,698	7,988	27,684	8,908
52 Washington State U	94,166	45,513	4,239	3,029	32,250	9,135
53 University of Cincinnati	93,599	56,361	3,269	10,405	18,158	5,406
54 University of New Mexico	90,315	51,780	2,529	4,038	19,685	12,283
55 U Med & Dent NJ	86,866	40,687	5,393	8,984	22,781	9,021
56 U of South Florida	86,186	19,910	7,415	6,338	42,932	9,591
57 Utah State University	83,758	46,128	13,769	2,265	19,841	1,755
58 U TX Hlth Sci Ctr San Ant	83,535	51,671	8,274	7,300	11,733	4,557
59 New Mexico State U	80,286	59,632	10,088	3,516	5,650	1,400
60 Virginia Commonwealth U	76,597	47,923	2,515	7,089	16,577	2,493
Total, 1st 60 insts	10,525,421	5,802,868	1,039,906	689,521	2,249,950	743,176
61 Florida State University	76,588	39,775	3,719	1,893	27,766	3,435
62 Clemson University	76,572	24,133	13,889	5,410	28,517	4,623
63 Mississippi State U	76,201	33,918	17,601	5,913	8,869	9,900
64 U of Alaska Fairbanks	76,093	40,770	4,625	4,441	26,253	4
65 Auburn University	75,738	18,347	24,432	7,940	19,164	5,855
66 U of South Carolina	74,001	37,918	1,415	8,046	23,555	3,067
67 U CA Santa Barbara	73,619	59,336	1,291	2,711	6,683	3,598
68 U TX Med Br Galveston	72,773	32,775	8,785	6,115	16,841	8,257
69 Oklahoma State University	70,808	20,440	7,909	3,381	35,259	3,819
70 University Hawaii Manoa	70,079	39,392	25,204	434	3,290	1,759
Total, 1st 70 insts	11,267,893	6,149,672	1,148,776	735,805	2,446,147	787,493
71 U TX Hlth Sci Ctr Houston	66,432	46,821	748	6,313	5,799	6,751
72 Kansas State University	65,696	21,547	27,101	3,111	12,187	1,750
73 U MA Amherst	65,344	32,730	5,060	4,868	16,715	5,971
74 Oregon Health Sciences U	63,875	43,629	2	945	14,942	4,357
75 Arizona State University	62,563	30,699	997	5,780	23,137	1,950
76 U MA Worcester	61,790	34,923	220	3,776	18,055	4,816
77 U CA Riverside	60,995	23,743	2,624	1,103	30,035	3,490
78 SUNY Albany	59,122	32,511	6,463	1,863	5,831	12,454
79 West Virginia University	58,604	34,622	1,936	4,058	14,499	3,489
80 U Arkansas Main	57,815	16,040	22,672	5,605	11,531	1,967
Total, 1st 80 insts	11,890,129	6,456,937	1,216,599	773,227	2,598,878	834,488
81 Temple University	56,308	27,140	221	6,011	19,935	3,001
82 University of Vermont	51,775	33,695	2,572	4,878	7,496	3,134
83 University of Delaware	50,734	26,250	2,180	4,117	13,946	4,241
84 University of Idaho	49,338	16,586	8,825	7,495	16,235	197
85 U of Rhode Island	46,631	33,025	3,086	1,364	9,155	1
86 Med U of South Carolina	46,249	28,507	0	5,534	1,977	10,231
87 U of New Hampshire	43,707	25,032	1,953	1,476	10,044	5,202
88 University of Houston	43,131	22,830	10,386	1,183	6,099	2,633
89 U CA Santa Cruz	42,457	23,802	2,064	893	12,026	3,672
90 U of Nevada Reno	42,176	18,799	857	1,674	20,096	750
Total, 1st 90 insts	12,362,635	6,722,603	1,248,743	807,852	2,715,887	867,550
91 U of Central Florida	41,362	13,276	3,315	5,369	19,402	0
92 Texas Tech University	39,455	11,360	10,860	5,573	9,273	2,389
93 North Dakota State U	36,977	10,877	1,450	1,261	22,105	1,284
94 Montana State University	36,149	15,738	8,632	3,139	8,640	0
95 U of NE Med Ctr Omaha	33,997	12,256	4,972	3,639	11,078	2,052
96 University of Wyoming	33,820	15,115	3,820	1,185	12,025	1,675
97 U of Alabama Huntsville	31,482	21,583	1,262	2,948	5,689	0
98 University of Oregon	31,170	22,204	563	509	5,794	2,100
99 Sthrn IL U Carbondale	30,497	9,931	5,325	2,347	11,168	1,726
100 NJ Inst of Technology	29,983	12,572	6,008	3,288	7,011	1,104
Total, 1st 100 insts	12,707,527	6,867,515	1,294,950	837,110	2,828,072	879,880

See explanatory information and SOURCE at end of table

Table B-36. R&D expenditures at public universities and colleges, by source of funds: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institutional funds	Other
101 U of Maine	29,393	11,386	2,290	4,406	10,907	404
102 San Diego St University	29,309	12,268	7,696	1,272	5,665	2,408
103 Medical Col of Georgia	28,020	9,121	329	3,575	13,334	1,661
104 SUNY Hlth Sci Ctr Brklyn	27,773	16,695	101	4,306	4,300	2,371
105 Unif Svcs U of Hlth Sci	27,334	18,124	0	0	9,210	0
106 US Naval Postgrad School	26,538	26,225	62	59	0	192
107 U Mississippi, All Camp	25,000	15,836	2,596	1,998	3,251	1,319
108 Florida A&M University	24,691	20,730	2,360	1,601	0	0
109 U PR Mayaguez	22,967	9,369	7,750	1,241	4,607	0
110 U Arkansas Medical Sci	22,762	13,410	220	2,158	5,697	1,277
Total, 1st 110 insts.	12,971,314	7,020,679	1,318,354	857,726	2,885,043	889,512
111 The University of Alabama	21,960	11,482	64	2,332	8,082	0
112 SUNY Col Env Sci Frstry	21,839	3,351	928	2,044	14,839	677
113 Michigan Tech University	21,786	10,984	1,162	2,885	6,755	0
114 Desert Research Institute	21,459	15,272	1,844	3,798	500	45
115 Wright State University	21,055	9,624	2,879	1,429	5,573	1,550
116 NM Inst Mining & Tech	20,945	7,582	1,956	6,057	5,226	124
117 University of Louisville	20,475	9,274	62	4,180	6,959	0
118 Col of William & Mary	20,443	10,426	1,447	831	7,283	456
119 U MD Center for EES	19,817	5,452	3,418	114	9,150	1,683
120 U of Missouri Rolla	19,706	6,472	283	1,122	9,195	2,634
Total, 1st 120 insts.	13,180,799	7,110,598	1,332,397	882,518	2,958,605	896,681
121 U WI Milwaukee	19,180	7,977	6,531	363	2,771	1,538
122 U of Nevada Las Vegas	19,031	9,543	1,869	1,582	5,552	485
123 George Mason University	18,871	12,679	871	508	2,594	2,219
124 CUNY City College	18,831	13,585	1,241	1,211	2,794	0
125 University North Dakota	18,732	16,660	43	728	1,119	182
126 U PR Med Sci Campus	17,765	11,973	564	0	4,042	1,186
127 U TX Arlington	17,453	4,637	5,020	3,275	4,521	0
128 Georgia State University	17,100	6,771	580	731	8,403	615
129 University of Montana	16,908	8,675	636	826	6,262	509
130 University of Akron	16,783	4,016	2,331	4,214	5,869	353
Total, 1st 130 insts.	13,361,453	7,207,114	1,352,083	895,956	3,002,532	903,768
131 Ohio University	16,425	5,836	2,277	2,690	5,129	493
132 SUNY Binghamton	15,803	5,100	1,433	1,502	5,502	2,266
133 U MA Lowell	15,155	7,281	499	3,695	2,568	1,112
134 Old Dominion University	14,911	7,888	3,422	1,061	2,540	0
135 U MD Biotechnology Inst	14,839	6,079	197	925	7,425	213
136 U TX Dallas	14,492	7,224	2,290	1,220	3,158	600
137 South Dakota State U	14,083	5,711	6,143	416	1,245	568
138 U of South Alabama	13,917	8,838	648	2,063	2,368	0
139 Colorado School of Mines	13,880	8,161	511	5,087	121	0
140 Western Illinois U	13,780	8,983	1,594	250	1,712	1,241
Total, 1st 140 insts.	13,508,738	7,278,215	1,371,097	914,865	3,034,300	910,261
141 NC A&T State University	13,637	10,132	1,071	338	863	1,233
142 Florida International U	13,520	10,936	1,208	413	564	399
143 Memphis State University	13,305	4,027	3,718	419	4,468	673
144 Med Col of Ohio Toledo	12,471	8,726	223	1,164	1,811	547
145 CUNY Hunter College	12,264	7,156	598	102	3,379	1,029
146 U TX El Paso	12,062	9,085	2,554	140	2	281
147 SUNY Hlth Sci Ctr Syrcse	11,751	6,555	36	280	793	4,087
148 Northern Illinois U	11,445	6,238	156	988	4,063	0
149 U of Missouri Kansas City	11,420	4,758	458	834	4,416	954
150 Kent State University	11,312	6,005	899	130	3,449	829
Total, 1st 150 insts.	13,631,925	7,351,833	1,382,018	919,673	3,058,108	920,293
Total, all other sampled insts.	374,972	208,541	51,072	27,317	68,867	19,175
Estimated total non-sampled insts.	148,313	78,644	12,503	9,058	42,174	5,933

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-37. R&D expenditures at private universities and colleges, by source of funds: fiscal year 1994

[Dollars in thousands]

Page 1 of 2

Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institutional funds	Other
Total, all institutions	6,925,999	5,022,103	116,094	473,515	669,189	645,098
1 Johns Hopkins U	784,043	711,692	1,560	10,418	28,027	32,346
2 MA Institute of Tech	363,918	270,718	1,728	55,500	8,724	27,248
3 Stanford University	318,561	268,559	1,006	14,714	11,586	22,696
4 Cornell University	312,683	193,981	8,107	17,199	66,177	27,219
5 Harvard University	278,459e	190,183	251	10,228	15,779e	62,018
6 U of Pennsylvania	251,461	186,053	2,796	12,107	22,064	28,441
7 Columbia University	236,417	203,101	1,569	1,632	6,300	23,815
8 Yale University	230,375	171,425	2,309	11,713	19,306	25,622
9 Duke University	220,220	148,350	4,587	30,241	14,279	22,763
10 U of Southern California	207,275	149,735	8,960	14,502	34,078	0
Total, 1st 10 insts.	3,203,412	2,493,797	32,873	178,254	226,320	272,168
11 Washington University	192,378	138,299	3,667	20,629	12,048	17,735
12 Baylor Col of Medicine	186,865	92,404	4,021	11,919	25,662	52,859
13 Northwestern University	179,478	83,684	3,138	9,203	66,060	17,393
14 University of Rochester	167,485	135,863	7,288	10,261	3,655	10,418
15 New York University	139,202	89,013	1,381	5,929	17,099	25,780
16 Emory University	136,343	88,735	3,025	8,966	19,457	16,160
17 Case Western Reserve U	133,272	97,302	3,513	5,708	12,468	14,281
18 California Inst of Tech	127,946	112,502	629	4,947	7,703	2,165
19 Carnegie Mellon U	122,580	87,790	7,042	14,112	4,769	8,867
20 University of Chicago	121,902	102,530	388	1,324	6,498	11,162
Total, 1st 20 insts.	4,710,863	3,521,919	66,965	271,252	401,739	448,988
21 University of Miami	121,475	91,563	2,638	11,140	5,391	10,743
22 Vanderbilt University	110,105	92,439	197	3,033	8,020	6,416
23 Princeton University	99,287	58,544	1,033	8,089	22,189	9,432
24 Yeshiva University	92,881	70,718	0	1,750	11,751	8,662
25 Boston University	90,504	72,551	785	8,695	0	8,473
26 CUNY Mt Sinai Sch Med	86,179	55,188	2,449	5,934	11,202	11,406
27 Tulane University	83,885	42,354	2,487	10,018	23,637	5,389
28 Georgetown University	82,661	54,992	1	6,773	14,095	6,800
29 Woods Hole Oceanograph	81,345	74,219	501	332	1,073	5,220
30 Rockefeller University	74,458	39,990	18	4,031	16,922	13,497
Total, 1st 30 insts.	5,633,643	4,174,477	77,074	331,047	516,019	535,026
31 Tufts University	73,749	49,672	0	5,131	12,675	6,271
32 Dartmouth College	57,845	41,762	937	2,833	6,815	5,498
33 Thomas Jefferson U	56,932	43,215	0	7,455	34	6,228
34 Brown University	55,146	36,864	68	1,467	14,774	1,973
35 Wake Forest University	52,581	36,722	375	9,064	3,778	2,642
36 Medical Col of Wisconsin	49,604	31,459	450	4,164	4,157	9,374
37 University of Dayton	47,768	39,994	290	5,313	2,057	114
38 Rush University	39,736	14,831	436	4,993	10,656	8,820
39 Syracuse University	38,650	19,309	4,454	4,522	6,465	3,900
40 George Washington U	38,429	24,379	426	2,676	3,142	7,806
Total, 1st 40 insts.	6,144,083	4,512,684	84,510	378,665	580,572	587,652
41 Rensselaer Polytech Inst	37,191	22,090	3,070	5,925	4,890	1,216
42 Loyola U of Chicago	36,830	23,587	709	3,795	5,011	3,728
43 Brandeis University	34,835	21,585	176	0	3,990	9,084
44 Rice University	33,309	25,672	2,427	3,837	0	1,373
45 The Medical Col of PA	30,473	16,130	4,038	3,831	5,589	885
46 Lehigh University	29,188	15,363	1,264	7,303	4,490	768
47 University of Notre Dame	22,833	16,358	952	3,710	1,813	0
48 Drexel University	20,886	11,006	1,127	5,764	2,989	0
49 Oregon Grad Inst Sci Tech	20,859	10,458	704	2,973	2,070	4,654
50 St Louis University	20,844	18,120	243	1,545	534	402
Total, 1st 50 insts.	6,431,331	4,693,053	99,220	417,348	611,948	609,762

See explanatory information and SOURCE at end of table.

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Table B-37. R&D expenditures at private universities and colleges, by source of funds: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Federal Govt	State & local govts	Industry	Institutional funds	Other
51 Howard University	19,836	15,196	908	1,741	1,990	1
52 Northeastern University	19,104	16,037	291	2,002	163	611
53 New York Medical College	18,725	14,913	154	1,807	0	1,851
54 Med Col Hampton Roads	17,873	10,162	0	4,064	58	3,589
55 Med Col PA Hahnemann U	14,745	10,194	135	1,725	2,105	586
56 Mercer University	14,201	11,115	0	849	2,237	0
57 Brigham Young University	13,859	8,126	786	1,712	3,072	163
58 Stevens Inst of Tech	13,460	7,644	2,175	1,884	1,757	0
59 Clark Atlanta University	12,709	11,025	139	200	1,345	0
60 Polytechnic University	11,869	6,872	1,300	2,589	1,008	100
Total, 1st 60 insts.	6,587,712	4,804,337	105,108	435,921	625,683	616,663
61 Worcester Polytech Inst	11,602	9,584	195	768	851	204
62 Rochester Inst of Tech	11,528	2,478	1,660	1,420	5,646	324
63 Boston College	10,724	7,938	77	406	1,230	1,073
64 Clarkson University	10,412	6,115	800	1,658	1,839	0
65 Meharry Medical College	10,336	10,154	0	0	22	160
66 Albany Medical College	10,324	8,344	0	0	1,503	477
67 Creighton University	9,645	4,653	132	3,467	1,324	69
68 C R Drew U of Med & Sci	9,347	7,674	0	1,673	0	0
69 Loma Linda University	9,204	5,082	0	2,514	1,225	383
70 Inst Paper Sci and Tech	8,995	1,629	0	1,971	4,916	479
Total, 1st 70 insts.	6,689,829	4,867,988	107,972	449,798	644,239	619,832
71 Illinois Inst of Tech	8,853	6,738	141	1,254	720	0
72 Southern Methodist U	8,277	4,984	640	396	1,624	633
73 University of Tulsa	7,945	3,319	1,047	2,652	925	2
74 Catholic U of America	7,542	6,058	0	1,484	0	0
75 Morehouse School of Med	7,522	6,663	0	572	277	10
76 Tuskegee University	7,121	6,694	10	166	251	0
77 Finch U Hlth Sci Chicago	7,057	5,214	0	82	832	929
78 University of Denver	6,671	6,144	100	136	171	120
79 Hampton University	5,342	5,078	0	0	264	0
80 Marquette University	5,322	2,640	199	1,041	337	1,105
Total, 1st 80 insts.	6,761,481	4,921,520	110,109	457,581	649,640	622,631
81 Wesleyan University	5,112	2,710	444	9	897	1,052
82 Alfred University	4,712	859	1,033	2,012	755	53
83 Florida Inst of Tech	4,384	1,654	1,627	947	41	115
84 New Sch for Socl Res	4,383	616	0	0	0	3,767
85 Xavier University of LA	4,176	4,176	0	0	0	0
86 American University	3,226	3,052	5	36	95	38
87 Texas Christian U	3,110	2,600	53	381	76	0
88 Ponce School of Medicine	3,102	2,874	98	0	47	83
89 Seton Hall University	3,072	3,072	0	0	0	0
90 Clark University	2,711	2,301	0	0	0	410
Total, 1st 90 insts.	6,799,469	4,945,434	113,369	460,966	651,551	628,149
91 Bryn Mawr College	2,559	1,294	0	3	1,262	0
92 U of Detroit Mercy	2,527	1,339	0	1,148	40	0
93 Institute of Textile Tech	2,297	0	0	2,239	58	0
94 Fordham University	2,241	1,304	247	0	87	603
95 U Ctrl Del Caribe Esc Med	2,139	1,664	291	0	180	4
96 Johnson C Smith U	2,083	1,803	0	280	0	0
97 Hampshire College	1,978	586	0	0	95	1,297
98 Midwestern University	1,928	465	0	362	1,019	82
99 Smith College	1,920	627	0	0	483	810
100 Villanova University	1,848	1,061	320	227	240	0
Total, 1st 100 insts.	6,820,989	4,955,577	114,227	465,225	655,015	630,945
Total, all other sampled insts.	49,635	31,051	1,099	4,646	7,420	5,419
Estimated total non-sampled insts.	55,375	35,475	768	3,644	6,754	8,734

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-38. Industry-sponsored R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
Total, all institutions	1,429,563	1,360,944	1,279,616	1,204,628	1,127,702	994,860	872,294	790,099
1 MA Institute of Tech	55,500	58,106	49,828	45,712	43,460	39,650	33,256	35,064
2 Pennsylvania State U	45,408	41,736	42,693	37,587	34,806	30,256	24,068	20,114
3 University of Washington	33,199	30,780	26,442	26,033	22,215	19,135	16,580	18,564
4 Duke University	30,241	34,572	31,977	22,876	12,252	12,551	12,379	8,085
5 Texas A&M University	28,576	27,182	28,675	23,050	26,197	21,204	18,534	13,398
6 Georgia Institute of Tech	27,832	28,872	23,776	22,496	21,256	21,346	21,567	23,628
7 University of Michigan	26,732	26,733	24,992	24,717	27,128	22,023	14,782	14,451
8 University of Minnesota	23,726	21,524	17,529	19,270	18,086	12,389	10,670	11,056
9 NC State U Raleigh	22,101	22,229	20,342	20,961	21,398	21,735	18,580	11,748
10 Purdue University	21,639	13,174	12,607	11,962	11,632	11,451	10,325	9,579
Total, 1st 10 insts.	314,954	304,908	278,861	254,664	238,430	211,740	180,741	165,687
11 Washington University	20,629	19,388	15,192	16,442	14,132	13,500	12,839	12,016
12 U MD College Park	18,433	19,271	15,757	11,938	14,229i	12,940i	11,451i	10,149e
13 Cornell University	17,199	15,789	13,879	16,761	16,620	16,627	15,806	17,169
14 U MD Baltimore Prof Sch	15,411	14,420	13,724	11,898	12,791	11,183	8,017	7,652
15 University of Arizona	15,053	13,469	12,292	12,091	10,246	9,729	12,245	11,638
16 Ohio State University	14,883	13,647	13,994	15,409	14,744	20,244	10,910	9,278
17 University of Virginia	14,826	10,389	8,296	8,153	6,406	5,768	4,733	3,260
18 U of Alabama Birmingham	14,772	10,832	8,907	7,867	7,241	6,602	6,153	4,544
19 Stanford University	14,714	15,337	14,454	11,935	12,931	13,764	11,628	10,979
20 U of Southern California	14,502	13,444	15,529	13,852	18,896	14,716	11,805	9,999
Total, 1st 20 insts.	475,376	450,894	410,885	381,010	366,666	336,813	286,328	262,371
21 Carnegie Mellon U	14,112	18,180	19,003	20,438	20,295	18,976	17,092	16,130
22 U WI Madison	13,729	12,392	12,912	12,624	12,123	11,035	9,556	8,586
23 University of IL Urbana	13,527	16,095	20,070	24,434	20,762	15,785	13,686	11,414
24 U CA Los Angeles	13,394	13,606	14,671	8,619	8,310	7,548	8,492	14,360
25 University of Colorado	13,312	12,218	10,655	8,251	7,426	6,728	5,234	4,502
26 U TX SW Med Ctr Dallas	13,092	11,173	10,874	9,330	8,537	6,938	5,915	5,566
27 University of Florida	12,755	11,105	11,849	13,376	12,237	10,579	8,529	9,404
28 VA Polytech Inst & St U	12,580	13,224	14,333	12,443	11,394	9,825	9,058	7,010
29 U CA Berkeley	12,547	12,269	12,553	11,970	10,892	8,480	8,267	6,580
30 U of Pennsylvania	12,107	11,440	10,034	7,171	11,973	9,582	6,230	7,483
Total, 1st 30 insts.	606,531	582,596	547,839	509,666	490,615	442,289	378,387	353,406
31 Baylor Col of Medicine	11,919	9,914	6,630	7,294	7,746	7,263	5,329	4,879
32 Colorado State University	11,793	5,369	5,074	3,380	2,883	2,432	1,525	1,178
33 University of Kentucky	11,790	9,924	9,253	7,476	6,720	5,819	4,191	6,312
34 Yale University	11,713	9,994	9,442	8,700	7,014	6,563	5,649	5,563
35 University of Pittsburgh	11,500	9,804	7,873	7,110	6,481	9,406	8,738	6,547
36 University of Miami	11,140	10,828	8,566	6,593	5,366	4,702	4,907	7,300
37 U CA San Francisco	10,977	9,244	6,573	5,475	5,276	6,226	5,127	4,008
38 U of Tennessee System	10,699	11,722	8,479	8,857	7,199	6,515	7,225	5,662
39 Johns Hopkins U	10,418	12,564	13,296	14,953	14,961	11,013	9,247	7,755
40 University of Cincinnati	10,405	10,621	4,685	4,050	4,468	4,160	3,449	2,299
Total, 1st 40 insts.	718,885	682,580	627,710	583,554	558,729	506,388	433,774	404,909
41 U of Missouri Columbia	10,299	7,907	7,612	9,537	9,130	6,434	4,252	4,206
42 University of Rochester	10,261	7,868	9,085	6,814	6,419	4,913	4,705	6,267
43 Harvard University	10,228	9,319e	11,647e	11,957	10,565e	10,461e	9,093e	7,778e
44 U of Iowa	10,205	10,478	13,545	7,828	6,827	10,301	5,527	2,615
45 Tulane University	10,018	6,618	7,462	6,758	5,952	5,577	5,418	4,945
46 U CA San Diego	9,764	10,081	7,485	11,225	9,135	6,824	5,055	5,902
47 Northwestern University	9,203	8,784	6,978	6,960	5,989	5,289	3,532	3,101
48 Wake Forest University	9,064	8,333	6,392	5,927	5,642	4,859	4,183	2,402
49 Louisiana St U, All Camp	9,037	9,203	9,657	8,616	3,759	2,120	2,348	1,481
50 U Med & Dent NJ	8,984	7,431	5,337	3,471	2,908	2,583	1,963	1,421
Total, 1st 50 insts.	815,948	768,602	712,910	662,647	625,055	565,749	479,870	445,027

See explanatory information and SOURCE at end of table.

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Table B-38. Industry-sponsored R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
51 Emory University	8,966	8,145	7,465	6,920	7,170	6,169	4,701	3,350
52 University of Georgia	8,773	8,803	6,679	5,821	5,797	4,877	5,659	4,982
53 Boston University	8,695	9,982	8,437	6,405	4,608	2,555	2,379	2,276
54 Iowa State University	8,185	7,402	8,011	6,537	5,525	4,408	3,961	3,597
55 SUNY Buffalo	8,143	5,584	7,831	3,086	2,118	1,759	1,178	779
56 Princeton University	8,089	5,829	4,322	4,595	4,964	5,640	4,487	4,122
57 U of South Carolina	8,046	6,414	9,019	7,625	3,072	1,968	3,053	1,531
58 Wayne State University	7,988	7,738	7,486	7,295	5,875	3,850	2,897	2,761
59 Auburn University	7,940	6,059	6,807	6,450	5,541	4,111	2,615	3,112
60 Rutgers the State U NJ	7,796	7,734	7,889	7,769	6,754	6,087	4,498	3,087
Total, 1st 60 insts.	898,569	842,292	786,856	725,150	676,479	607,173	515,298	474,624
61 University of Connecticut	7,651	8,357	5,831	7,421	6,388	4,996	4,310	3,729
62 University of Idaho	7,495	5,608	4,064	4,447	3,731	3,788	3,339	2,630
63 Thomas Jefferson U	7,455	6,138	5,029	9,966	8,518	8,094	7,465	6,287
64 U CA Davis	7,423	6,852	6,125	6,599	7,461	8,039	6,975	5,324
65 Lehigh University	7,303	8,088	7,467	8,133	8,030	7,596	7,479	6,731
66 U TX Hlth Sci Ctr San Ant	7,300	6,746	5,268	6,876	6,166	5,535	4,908	4,404
67 Virginia Commonwealth U	7,089	6,591	6,285	6,201	4,835	3,910	3,283	3,192
68 Georgetown University	6,773	5,914	4,947	4,549	3,362	4,370	2,972	2,536
69 U of South Florida	6,338	5,041	5,127	6,091	4,250	327	144	117
70 U TX Hlth Sci Ctr Houston	6,313	6,907	5,144	6,392	5,142	3,266	3,385	3,494
Total, 1st 70 insts.	969,709	908,534	842,143	791,825	734,362	657,094	559,558	513,068
71 Michigan State University	6,271	6,442	6,304	4,693	4,557	4,068	3,615	3,137
72 U CA Irvine	6,243	4,898	3,825	4,163	3,115	4,582	5,181	4,722
73 U TX Med Br Galveston	6,115	4,831	3,978	2,652	2,260	1,847	1,781	1,146
74 NM Inst Mining & Tech	6,057	9,803	9,616	9,907i	10,194	7,695	6,853	5,418
75 Temple University	6,011	6,011	4,155	3,452	2,707	2,544	3,699	0
76 CUNY Mt Sinai Sch Med	5,934	5,549	4,642	3,978	4,053	3,732	2,982	2,870
77 New York University	5,929	4,917	4,588	5,947	5,260	4,066	3,677	3,036
78 Rensselaer Polytech Inst	5,925	10,813	12,161	12,236	11,418	9,066	9,014	8,006
79 Mississippi State U	5,913	6,012	6,920	7,163	6,389	3,886	3,430	2,823
80 Arizona State University	5,780	4,772	5,790	6,860	7,354	2,382	2,832	5,575
Total, 1st 80 insts.	1,029,887	972,582	904,122	852,876	791,669	700,962	602,622	549,801
81 Drexel University	5,764	4,233	3,429	2,873	3,888	4,202	2,928	2,468
82 Case Western Reserve U	5,708	6,480	6,851	4,667	4,954	2,915	3,975	3,433
83 Indiana University	5,689	4,850	3,569	2,367	2,316	2,591	2,658	4,597
84 U Arkansas Main	5,605	4,964	4,051	3,323	2,947	2,444	3,112	2,353
85 Texas Tech University	5,573	5,284	4,815	4,428	4,391	4,393	4,229	3,857
86 Med U of South Carolina	5,534	1,793	2,868	2,115	2,264	2,089	1,849	1,548
87 Clemson University	5,410	6,035	7,174	6,163	7,595	3,849	3,791	3,105
88 U of Central Florida	5,369	5,810	3,947	4,287	3,813	2,580	1,864	1,990i
89 University of Dayton	5,313	4,813	4,307	4,359	4,790	4,164	4,013	3,335
90 Tufts University	5,131	4,647e	3,451e	7,740e	7,761e	8,010e	8,375	6,314e
Total, 1st 90 insts.	1,084,983	1,021,491	948,584	895,198	836,388	738,199	639,416	582,801
91 Oregon State University	5,110	4,291	3,115	3,776	3,167	2,285	1,944	1,890
92 Colorado School of Mines	5,087	5,770	5,542	4,847	4,060	3,793	2,647	1,995
93 University of IL Chicago	5,061	4,570	3,539	4,844	5,157	5,333	2,664	1,728
94 SUNY Stony Brook	5,012	4,670	2,890	2,783	2,426	3,093	1,624	1,269
95 Rush University	4,993	5,036	3,218	4,092	3,622	3,714	2,139	1,320
96 California Inst of Tech	4,947	3,835	3,280	2,764	2,268	3,567	3,273	3,436
97 University of Oklahoma	4,887	3,918	4,319	3,530	2,562	1,991	1,950	2,026
98 University of Vermont	4,878	4,573	4,337	4,181	3,473	3,486	3,139	2,877
99 U MA Amherst	4,868	5,288	5,466	--	--	--	--	--
100 Syracuse University	4,522	2,166	5,195	4,405	3,851	3,937	2,595	3,975
Total, 1st 100 insts.	1,134,348	1,065,608	989,485	930,420	866,974	769,398	661,391	603,317

See explanatory information and SOURCE at end of table.

Table B-38. Industry-sponsored R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
101 U of Alaska Fairbanks	4,441	4,751	3,275	1,547	4,100	3,039	2,672e	3,024i
102 U of Maine	4,406	4,117	3,545	4,719	4,663	4,002	2,823	2,051
103 University of Kansas	4,320	4,037	4,877	4,228	4,473	2,809	2,934	3,259
104 SUNY Hlth Sci Ctr Brklyn	4,306	4,421	3,256	732	1,084	1,425	1,054	897
105 U TX Austin	4,268	4,106	4,814	5,734	3,507	2,694	3,175	3,161
106 University of Akron	4,214	4,922	4,697	3,813	3,873	2,591	2,422	2,426
107 University of Louisville	4,180	3,651	3,547	3,093	1,403	1,697	400	403
108 Medical Col of Wisconsin	4,164	5,053	4,684	4,175	3,189	3,684	3,243	2,018
109 University of Delaware	4,117	4,857	5,075	4,732	4,397	4,073	3,558	3,659
110 University of Utah	4,087	4,357	4,124	2,908	3,443	2,700	2,248	2,268
Total, 1st 110 insts.	1,176,851	1,109,880	1,031,379	966,101	901,106	798,112	685,920	626,483
111 Med Col Hampton Roads	4,064	544	0	0	0	0	0	0
112 West Virginia University	4,058	3,973	5,585	11,163	10,082	3,953	754	862
113 University of New Mexico	4,038	5,474	8,886	4,684	4,022	2,496	1,140	4,858
114 Rockefeller University	4,031	4,907	4,623	4,816	4,918	3,453	3,764	3,476
115 Rice University	3,837	4,550	4,147	3,600	3,616	3,232	1,195	1,182i
116 The Medical Col of PA	3,831	3,681	2,938	2,496	1,263	0	0	0
117 Desert Research Institute	3,798	3,293	4,466	3,670	3,329	3,079	2,868	3,289
118 Loyola U of Chicago	3,795	3,614	3,442	1,545	1,398	1,305	475	407
119 U MA Worcester	3,776	3,721	3,485	--	--	--	--	--
120 University of Notre Dame	3,710	4,024	4,658	4,952	3,965	4,204	3,114	2,824
Total, 1st 120 insts.	1,215,789	1,147,661	1,073,609	1,003,027	933,699	819,834	699,230	643,381
121 U MA Lowell	3,695	3,691	3,770	3,599	3,892	2,849	2,626	1,201
122 U of Nebraska Lincoln	3,680	2,287	3,712	2,806	3,394	2,675	2,204	1,938
123 U of NE Med Ctr Omaha	3,639	3,488	2,163	1,682	1,595	1,194	792	583
124 Medical Col of Georgia	3,575	2,777	2,090	1,731	1,920	1,810	1,078	1,011
125 New Mexico State U	3,516	3,466	3,958	4,939	7,293	6,242	7,844	9,847
126 Creighton University	3,467	3,116	2,654	3,357e	3,886e	5,229	5,589	4,143i
127 Oklahoma State University	3,381	3,531	3,132	2,473	1,963	1,645	3,761	3,170
128 NJ Inst of Technology	3,288	3,459	2,173	2,018	1,710	1,125	1,001	1,026
129 U TX Arlington	3,275	3,363	2,351	2,884	2,286	2,407	1,858	1,138
130 Montana State University	3,139	2,910	2,983	4,043	3,833	2,902	2,770	2,454i
Total, 1st 130 insts.	1,250,444	1,179,749	1,102,595	1,032,559	965,471	847,912	728,753	669,892
131 Kansas State University	3,111	2,889	2,586	2,389	2,483	1,790	2,031	1,515
132 Vanderbilt University	3,033	2,523	3,794	1,941	2,313	2,759	7,938	5,313
133 Washington State U	3,029	2,726	2,459	2,074	2,523	2,258	3,335	2,619
134 Oregon Grad Inst Sci Tech	2,973	2,638	2,244	1,673	1,591	1,573	1,225	1,722
135 U of Alabama Huntsville	2,948	2,857	1,963	1,847	2,529	2,170	1,369	992
136 Michigan Tech University	2,885	3,127	2,946	4,150	3,999	3,584	2,901	2,740
137 Dartmouth College	2,833	3,375	2,638	2,719	2,251	1,768	1,273	1,024
138 U CA Santa Barbara	2,711	2,487	2,447	2,379	2,655	2,645	2,108	1,970
139 Ohio University	2,690	2,201	1,779	839	454	393	100	62
140 George Washington U	2,676	2,168	1,181	1,248	988	1,100	990	359
Total, 1st 140 insts.	1,279,333	1,206,740	1,126,632	1,053,818	987,257	867,952	752,023	688,208
141 University of Tulsa	2,652	2,761	2,649	2,548	2,330	2,020	2,093	1,808i
142 Polytechnic University	2,589	1,420e	1,972	1,972	2,278	2,821	1,405	1,245
143 Idaho State University	2,546	1,678	1,083	603	475	411	315	269
144 Loma Linda University	2,514	2,228	2,750	2,508	3,266	1,964	1,390	420
145 U of NC Chapel Hill	2,379	2,539	3,298	3,677	2,179	579	409	509
146 Sthrn IL U Carbondale	2,347	2,033	2,004	2,190	1,884	1,504	1,117	1,191
147 The University of Alabama	2,332	2,419	2,240	2,396	1,798	2,082	1,448	1,354
148 Utah State University	2,265	3,268	5,167	2,155	2,089	1,315	1,529	1,316
149 Institute of Textile Tech	2,239	2,284	2,143	2,045	1,869	1,311	1,678	1,238
150 U Arkansas Medical Sci	2,158	1,803	1,330	1,191	1,117	1,679	753	476
Total, 1st 150 insts	1,303,354	1,229,173	1,151,268	1,075,103	1,006,542	883,638	764,160	698,034

See explanatory information and SOURCE at end of table.

Table B-38. Industry-sponsored R&D expenditures at universities and colleges: fiscal years 1987-94

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1990	1989	1988	1987
151 U of South Alabama	2,063	1,562	1,703	1,788	1,553	1,277	1,118	914
152 SUNY Col Env Sci Frstry	2,044	2,010	1,793	1,707	1,867	1,716	1,493	1,153
153 Alfred University	2,012	1,897	1,988	1,720	1,672	1,475	1,432	1,323
154 Northeastern University	2,002	1,445	1,444	1,976i	1,711	953	730	561
155 U Mississippi, All Camp	1,998	2,727	1,742	1,366	1,250	1,085	998	766
156 Inst Paper Sci and Tech	1,971	1,726	624	435	172	591	830	546
157 East Carolina University	1,952	2,109	1,470	1,498	1,692	1,584	1,044	1,029
158 Florida Atlantic U	1,909	2,504	1,943	1,736	639	626	1,023	999
159 Florida State University	1,893	1,377	598	1,408	669	832	571	280
160 Stevens Inst of Tech	1,884	1,659	6,237	1,635	960	600	1,966	1,852
Total, 1st 160 insts.	1,323,082	1,248,189	1,170,810	1,090,372	1,018,727	894,377	775,365	707,457
161 SUNY Albany	1,863	1,240	1,080	876	727	657	399	271
162 New York Medical College	1,807	1,480	1,429	1,981	1,706	878	2,287	800
163 Yeshiva University	1,750	1,780	1,650	1,601	0	0	0	0
164 Howard University	1,741	434	364	312	2,869	1,867i	2,116i	1,112
165 Med Col PA Hahnemann U	1,725	957	352	245	232	326	33	33
166 Brigham Young University	1,712	1,678	2,241	1,817	1,845	1,488	1,438	2,150
167 University of Toledo	1,694	1,956	1,798	1,861	1,885	1,152	703	481i
168 U of Nevada Reno	1,674	1,033	916	1,276	1,227	1,019	695	687
169 C R Drew U of Med & Sci	1,673	369	141	129	64i	0	0	0
170 Clarkson University	1,658	1,455	2,315	2,051	1,638	1,282	978	1,113
Total, 1st 170 insts.	1,340,379	1,260,571	1,183,096	1,102,521	1,030,920	903,046	784,014	714,104
171 Columbia University	1,632	5,919	6,454	6,619	5,618	5,408	4,841	3,915
172 Florida A&M University	1,601	1,503	1,291	142	145	393	366	0
173 U of Nevada Las Vegas	1,582	919	610	377	177i	198i	0	7i
174 St Louis University	1,545	1,054	523	1,058	1,148	913	651	203i
175 SUNY Binghamton	1,502	1,312	1,505	1,761	1,308	1,126	909	836
176 Catholic U of America	1,484	1,690	1,544	1,064	615	477	313	106
177 U of New Hampshire	1,476	1,467	1,813	1,278	1,464	1,183	1,124	1,057
178 Brown University	1,467	1,825	1,882	2,497	3,307	4,291	5,086	4,250
179 Wright State University	1,429	539	391	562	503	315	226	65
180 Rochester Inst of Tech	1,420	1,504	1,574i	1,271i	969i	666i	737	583i
Total, 1st 180 insts.	1,355,517	1,278,303	1,200,683	1,119,150	1,046,174	918,016	798,267	725,126
181 U of Rhode Island	1,364	1,387	1,253i	1,212	1,071	2,014e	3,544	1,130
182 University of Chicago	1,324	1,958	1,399	1,425	1,202	1,520	1,814	1,812
183 San Diego St University	1,272	1,418	1,865	1,980	1,994	2,303	1,815	1,353
184 North Dakota State U	1,261	1,191	1,193	1,455	1,289	1,257	1,246	1,995
185 Illinois Inst of Tech	1,254	1,031	1,145	1,660	1,819	2,089	1,465	1,002
186 U PR Mayaguez	1,241	382	1,008	650i	293	222	187	0
187 Tennessee Tech U	1,235	1,288	1,097	871	945	836	274	371
188 U TX Dallas	1,220	969	1,157	2,403	740	756	785	658
189 CUNY City College	1,211	1,327	1,105	1,032	442	667	607	1,397
190 University of Wyoming	1,185	2,268	2,841	2,000	2,001	1,535	1,800	1,216
Total, 1st 190 insts.	1,368,084	1,291,522	1,214,746	1,133,838	1,057,970	931,215	811,804	736,060
191 University of Houston	1,183	1,339	1,595	1,608	1,529	1,375	1,940	1,959
192 Western Michigan U	1,168	994	947	843	1,102	852i	603	710
193 Med Col of Ohio Toledo	1,164	920	661	685	468	144	156	0
194 U of Detroit Mercy	1,148	1,252	1,363	1,091	1,244	1,125	754	616i
195 U of Missouri Rolla	1,122	1,717	2,147	1,564	2,186	2,385	3,280	1,153
196 U CA Riverside	1,103	1,208	857	1,361	903	1,094	1,692	1,955
197 Old Dominion University	1,061	1,151	1,011	979	581	353	64	308
198 Marquette University	1,041	801	463	1,417	1,239	921	668	435
199 Northern Illinois U	988	1,317	1,458	1,629	2,351	1,656	1,152	890
200 Florida Inst of Tech	947	1,884	1,575	1,942	1,205	567	518	216
Total, 1st 200 insts.	1,379,009	1,304,105	1,226,823	1,146,957	1,070,778	941,687	822,631	744,302
Total, all other sampled insts.	37,852	56,839	52,793	57,671	56,924	53,173	49,663	45,797
Estimated total non-sampled insts.	12,702	0	0	0	0	0	0	0

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-39. R&D expenditures at universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

Page 1 of 4

Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Total, all institutions	21,081,209	3,323,766	2,171,202	1,425,973	938,070	11,520,581	358,548	951,112	391,957
1 Johns Hopkins U	784,043	210,522	117,188	40,593	119,297	270,314	1,021	9,784	15,324
2 University of Michigan	430,778	88,837	22,972	20,823	19,186	212,198	9,098	51,094	6,570
3 U WI Madison	392,718	55,021	39,838	21,898	10,031	222,482	11,540	31,028	880
4 MA Institute of Tech	363,918	153,530	95,154	16,094	18,514	37,690	8,503	8,179	26,254
5 Texas A&M University	355,750	82,565	21,890	80,878	6,963	141,130	1,570	17,547	3,207
6 University of Washington	343,910	20,332	19,375	57,912	6,516	218,998	7,321	10,675	2,781
7 U CA San Diego	331,901	15,806	35,450	102,266	13,542	156,724	3,998	4,115	0
8 Stanford University	318,561	92,946	44,030	6,192	14,513	152,104	3,710	5,066	0
9 University of Minnesota	317,865	30,625	15,802	11,560	21,815	219,241	6,970	11,852	0
10 Cornell University	312,683	41,416	45,211	4,389	23,614	184,425	3,670	9,958	0
Total, 1st 10 insts.	3,952,127	791,600	456,910	362,605	253,991	1,815,306	57,401	159,298	55,016
11 U CA San Francisco	312,393	0	0	0	0	312,393	0	0	0
12 Pennsylvania State U	302,997	129,313	22,486	21,360	3,518	96,520	6,393	10,409	12,998
13 U CA Berkeley	289,632	61,654	59,996	4,466	4,836	122,182	6,617	24,830	5,051
14 U CA Los Angeles	279,869	29,544	24,069	14,130	8,291	178,014	7,514	18,307	0
15 Harvard University	278,459e	6,027e	31,718e	9,714e	4,169e	168,143e	3,117e	46,480e	9,091e
16 University of Arizona	269,939	20,659	91,765	20,861	7,296	116,202	2,546	8,666	1,944
17 U TX Austin	260,602	106,743	64,108	25,826	15,897	23,584	3,961	16,183	4,300
18 U of Pennsylvania	251,461	11,918	23,245	801	8,408	183,502	2,296	21,291	0
19 University of IL Urbana	245,407	51,634	38,500	27,052	15,395	55,519	6,305	14,096	36,906
20 Columbia University	236,417	14,407	21,433	39,786	4,637	148,100	2,386	5,668	0
Total, 1st 20 insts.	6,679,303	1,223,499	834,230	526,601	326,438	3,219,465	98,536	325,228	125,306
21 Ohio State University	230,515	51,162	19,834	7,644	11,072	117,294	1,517	16,218	5,774
22 Yale University	230,375	7,001	19,128	2,299	5,342	186,775	7,207	2,623	0
23 U CA Davis	230,147	14,709	8,361	1,331	1,730	199,638	1,415	2,963	0
24 University of Colorado	228,067	26,666	35,005	36,036	11,598	107,413	7,423	3,833	93
25 Duke University	220,220	7,640	12,323	3,300	2,826	174,326	6,105	13,576	124
26 U of Southern California	207,275	26,861	7,014	11,591	35,013	117,145	2,446	5,530	1,675
27 U of NC Chapel Hill	201,622	0	9,415	11,413	9,404	150,449	2,727	18,214	0
28 U MD College Park	198,348	47,556	56,381	8,932	19,849	30,341	3,799	31,490	0
29 Georgia Institute of Tech	193,630	125,004	20,390	9,459	23,775	4,996	1,473	7,060	1,473
30 University of Pittsburgh	192,465	8,171	12,179	270	2,533	157,299	2,378	8,421	1,214
Total, 1st 30 insts.	8,811,967	1,538,269	1,034,260	618,876	449,580	4,465,141	135,026	435,156	135,659
31 Washington University	192,378	4,264	8,070	3,505	6,291	168,452	822	974	0
32 University of Georgia	187,849	5,067	8,658	8,426	6,613	130,849	6,004	22,232	0
33 Baylor Col of Medicine	186,865	0	0	0	0	186,865	0	0	0
34 Northwestern University	179,478	21,630	12,465	789	13,937	87,992	1,713	1,824	39,128
35 NC State U Raleigh	173,407	58,871	9,379	9,651	5,651	86,319	256	3,280	0
36 Rutgers the State U NJ	173,211	25,389	17,121	9,898	13,762	78,384	6,830	18,051	3,776
37 Purdue University	172,733	47,809	18,772	2,081	6,863	84,027	2,368	10,616	197
38 University of Florida	167,999	30,220	12,732	4,961	5,152	105,975	2,876	4,983	1,100
39 University of Rochester	167,485	55,780	13,126	382	2,794	88,367	6,001	535	500
40 Louisiana St U, All Camp	165,857	22,781	10,811	20,537	1,730	102,957	474	5,440	1,127
Total, 1st 40 insts.	10,579,229	1,810,080	1,145,394	679,106	512,373	5,585,328	162,370	503,091	181,487
41 Michigan State University	163,285	18,223	23,638	431	6,419	101,327	2,303	9,353	1,591
42 U of Iowa	157,036	17,841	14,569	1,588	1,368	114,664	1,014	5,233	759
43 Iowa State University	155,982	44,152	6,764	918	9,261	79,520	763	10,438	4,166
44 U of Tennessee System	153,340	29,887	13,530	13,069	16,556	73,866	163	5,083	1,186
45 VA Polytech Inst & St U	148,313	43,623	9,187	32,781	3,796	51,945	2,031	4,950	0
46 U of Alabama Birmingham	141,735	6,062	1,097	15	216	133,287	832	226	0
47 SUNY Buffalo	141,092	23,271	8,108	846	7,383	91,711	5,607	4,009	157
48 New York University	139,202	0	3,466	676	12,948	110,518	4,686	5,836	1,072
49 University of Connecticut	136,740	29,561	3,819	7,614	2,945	75,294	7,440	8,379	1,688
50 Indiana University	136,617	890	29,262	2,350	4,149	81,488	5,248	5,275	7,355
Total, 1st 50 insts.	12,052,571	2,023,590	1,258,834	739,394	577,414	6,498,948	192,457	561,873	200,061

See explanatory information and SOURCE at end of table.

Table B-39. R&D expenditures at universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
51 Emory University	136,343	0	5,495	2	451	121,583	1,399	7,413	0
52 Case Western Reserve U	133,272	24,859	5,422	315	301	98,002	515	3,858	0
53 University of Virginia	131,350	21,542	14,644	6,653	4,859	76,442	3,084	4,058	68
54 California Inst of Tech	127,946	23,093	54,539	14,850	6,625	25,670	0	758	2,411
55 Carnegie Mellon U	122,580	28,153	7,551	1,711	61,726	11,597	5,625	5,053	1,164
56 U TX MD Anderson Cncr	122,357	0	3,112	0	2,096	117,149	0	0	0
57 University of Chicago	121,902	0	31,971	3,791	3,413	78,823	1,306	2,598	0
58 University of Miami	121,475	1,683	1,330	25,528	558	84,018	1,679	6,652	27
59 U of Missouri Columbia	121,256	12,381	8,721	1,648	848	86,852	2,341	8,424	41
60 Oregon State University	119,772	12,107	4,154	25,740	2,080	72,240	110	2,769	572
Total, 1st 60 insts.	13,310,824	2,147,408	1,395,773	819,632	660,371	7,271,324	208,516	603,456	204,344
61 U TX SW Med Ctr Dallas	118,398	0	0	0	0	118,398	0	0	0
62 University of IL Chicago	113,741	8,364	7,464	946	2,481	83,844	1,671	3,565	5,406
63 SUNY Stony Brook	113,251	4,241	23,179	15,931	6,299	56,949	3,026	3,481	145
64 Colorado State University	112,457	16,437	7,740	11,432	1,711	62,196	2,111	4,011	6,819
65 U MD Baltimore Prof Sch	110,866	0	0	0	0	110,866	0	0	0
66 Vanderbilt University	110,105	10,579	8,056	77	773	83,959	2,980	3,681	0
67 University of Kentucky	105,539	16,900	2,422	218	1,046	78,171	776	1,782	4,224
68 U CA Irvine	104,778	9,754	14,388	1,146	4,262	70,102	729	4,397	0
69 University of Utah	103,771	15,636	9,215	4,870	8,549	63,996	1,033	472	0
70 U of Nebraska Lincoln	102,746	14,565	6,535	5,151	1,297	71,200	981	2,830	187
Total, 1st 70 insts.	14,406,476	2,243,884	1,474,772	859,403	686,789	8,071,005	221,823	627,675	221,125
71 Princeton University	99,287	24,454	25,463	8,190	8,561	16,239	6,281	10,099	0
72 University of Oklahoma	95,747	14,059	8,566	12,655	3,407	43,580	3,307	10,173	0
73 University of Kansas	95,701	7,278	8,411	7,742	729	57,486	1,386	2,305	10,364
74 Wayne State University	94,632	7,704	9,526	0	669	69,159	2,221	3,661	1,692
75 Washington State U	94,166	9,185	5,832	685	473	55,918	282	11,987	9,804
76 University of Cincinnati	93,599	19,430	4,736	351	586	65,469	420	540	2,067
77 Yeshiva University	92,881	0	0	0	0	92,881	0	0	0
78 Boston University	90,504	7,732	9,701	1,168	2,761	64,285	188	1,302	3,367
79 University of New Mexico	90,315	36,271	4,439	2,267	2,528	30,464	2,001	5,174	7,171
80 U Med & Dent NJ	86,866	0	0	0	0	86,866	0	0	0
Total, 1st 80 insts.	15,340,174	2,369,997	1,551,446	892,461	706,503	8,653,352	237,909	672,916	255,590
81 U of South Florida	86,186	11,697	1,937	8,835	342	56,049	5,390	1,936	0
82 CUNY Mt Sinai Sch Med	86,179	0	0	0	0	86,179	0	0	0
83 Tulane University	83,885	8,829	2,944	240	744	61,322	800	8,401	605
84 Utah State University	83,758	25,448	5,877	14,912	442	26,319	1,664	2,016	7,080
85 U TX Hlth Sci Ctr San Ant	83,535	0	0	0	0	83,535	0	0	0
86 Georgetown University	82,661	0	4,907	715	715	72,439	81	3,557	247
87 Woods Hole Oceanograph	81,345	17,371	0	63,974	0	0	0	0	0
88 New Mexico State U	80,286	43,255	2,730	9,585	2,893	19,327	62	811	1,623
89 Virginia Commonwealth U	76,597	299	2,813	0	237	70,569	1,361	1,318	0
90 Florida State University	76,588	1,555	46,225	11,752	1,959	8,090	2,925	4,082	0
Total, 1st 90 insts.	16,161,194	2,478,451	1,618,879	1,002,474	713,835	9,137,181	250,192	695,037	265,145
91 Clemson University	76,572	24,055	5,376	741	3,667	35,024	236	5,861	1,612
92 Mississippi State U	76,201	17,936	3,500	3,587	385	41,822	0	3,451	5,520
93 U of Alaska Fairbanks	76,093	3,484[i]	15,465[i]	35,838[i]	90[i]	18,053[i]	0[i]	3,163[i]	0[i]
94 Auburn University	75,738	21,299	3,794	481	982	44,814	327	1,199	2,842
95 Rockefeller University	74,458	0	6,028	0	1,291	67,139	0	0	0
96 U of South Carolina	74,001	13,459	7,646	13,591	6,270	18,901	1,309	7,446	5,379
97 Tufts University	73,749	4,521	3,190	1	191	61,668	1,650	2,528	0
98 U CA Santa Barbara	73,619	28,477	17,084	9,789	5,710	3,133	2,852	6,462	112
99 U TX Med Br Galveston	72,773	0	0	0	0	72,773	0	0	0
100 Oklahoma State University	70,808	19,753	7,008	1,890	903	35,751	162	4,123	1,218
Total, 1st 100 insts.	16,905,206	2,611,435	1,687,970	1,068,392	733,324	9,536,259	256,728	729,270	281,828

See explanatory information and SOURCE at end of table.

Table B-39. R&D expenditures at universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
101 University Hawaii Manoa	70,079	2,403	20,223	8,141	1,151	29,589	534	3,258	4,780
102 U TX Hlth Sci Ctr Houston	66,432	0	0	0	0	65,238	0	1,194	0
103 Kansas State University	65,696	9,355	5,235	237	851	46,060	572	2,197	1,189
104 U MA Amherst	65,344	9,962	15,835	6,386	12,704	17,229	2,547	542	139
105 Oregon Health Sciences U	63,875	0	0	0	0	60,871	3,004	0	0
106 Arizona State University	62,563	19,555	16,816	3,446	2,064	7,840	2,928	7,551	2,363
107 U MA Worcester	61,790	0	0	0	0	61,790	0	0	0
108 U CA Riverside	60,995	482	6,196	3,162	970	48,368	1,044	773	0
109 SUNY Albany	59,122	0	3,301	6,776	706	37,996	4,039	6,304	0
110 West Virginia University	58,604	13,108	1,734	7,320	5,361	27,054	67	2,324	1,636
Total, 1st 110 insts.	17,539,706	2,666,300	1,757,310	1,103,860	757,131	9,938,294	271,463	753,413	291,935
111 Dartmouth College	57,845	6,545	3,028	1,539	943	43,869	992	666	263
112 U Arkansas Main	57,815	10,220	3,861	1,915	837	36,942	472	3,041	527
113 Thomas Jefferson U	56,932	0	0	0	0	56,932	0	0	0
114 Temple University	56,308	400	1,096	17	545	39,870	4,416	9,546	418
115 Brown University	55,146	8,550	7,492	5,202	8,470	21,537	1,607	2,288	0
116 Wake Forest University	52,581	0	1,177	0	64	51,090	0	0	250
117 University of Vermont	51,775	1,953	938	65	129	46,542	787	24	1,337
118 University of Delaware	50,734	14,668	8,993	7,154	3,795	12,061	582	3,481	0
119 Medical Col of Wisconsin	49,604	0	0	0	0	49,604	0	0	0
120 University of Idaho	49,338	7,303	3,364	2,675	157	34,860	66	913	0
Total, 1st 120 insts.	18,077,784	2,715,939	1,787,259	1,122,427	772,071	10,331,601	280,385	773,372	294,730
121 University of Dayton	47,768	41,734	2,120	159	463	479	1,949	425	439
122 U of Rhode Island	46,631	5,415 i	1,149 i	22,534 i	278 i	10,158 i	3,450 i	2,773 i	874 i
123 Med U of South Carolina	46,249	0	0	0	0	46,249	0	0	0
124 U of New Hampshire	43,707	3,551	1,469	23,016	773	8,980	458	2,315	3,145
125 University of Houston	43,131	21,961	8,755	1,379	1,309	5,630	2,973	1,062	62
126 U CA Santa Cruz	42,457	0	19,761	9,443	1,373	7,314	715	3,851	0
127 U of Nevada Reno	42,176	7,100	1,586	4,089	101	17,248	305	1,360	10,387
128 U of Central Florida	41,362	10,747	7,776	8,909	979	947	520	376	11,108
129 Rush University	39,736	0	0	0	0	36,304	3,432	0	0
130 Texas Tech University	39,455	9,513	4,070	1,017	1,194	20,018	74	3,141	428
Total, 1st 130 insts.	18,510,456	2,815,960	1,833,945	1,192,973	778,541	10,484,928	294,261	788,675	321,173
131 Syracuse University	38,650	13,214	5,896	1,294	8,225	4,904	975	3,213	929
132 George Washington U	38,429	6,351	901	141	6,032	16,556	750	7,226	472
133 Rensselaer Polytech Inst	37,191	26,012	6,416	1,092	2,583	563	59	251	215
134 North Dakota State U	36,977	3,190	4,684	205	938	25,000	582	2,176	202
135 Loyola U of Chicago	36,830	0	533	0	1,950	32,109	175	1,763	300
136 Montana State University	36,149	4,759	3,857	388	475	24,839	0	1,538	293
137 Brandeis University	34,835	0	3,736	0	1,132	15,807	1,578	12,582	0
138 U of NE Med Ctr Omaha	33,997	0	0	0	0	33,997	0	0	0
139 University of Wyoming	33,820	2,160	2,604	7,624	491	16,967	267	276	3,431
140 Rice University	33,309	4,627	8,943	3,671	11,708	3,967	313	80	0
Total, 1st 140 insts.	18,870,643	2,876,273	1,871,515	1,207,388	812,075	10,659,637	298,960	817,780	327,015
141 U of Alabama Huntsville	31,482	12,636	7,805	4,875	4,592	191	0	9	1,374
142 University of Oregon	31,170	2,081	12,123	1,603	2,184	9,214	2,017	1,948	0
143 Sthrn IL U Carbondale	30,497	4,529	1,719	786	2,664	14,572	375	1,553	4,299
144 The Medical Col of PA	30,473	0	0	0	0	30,473	0	0	0
145 NJ Inst of Technology	29,983	8,952	1,811	7,683	2,274	0	0	302	8,961
146 U of Maine	29,393	3,337	877	6,920	46	15,864	328	2,021	0
147 San Diego St University	29,309	2,356	1,436	533	775	15,421	3,282	1,398	4,108
148 Lehigh University	29,188	21,795	4,664	1,146	357	660	310	256	0
149 Medical Col of Georgia	28,020	0	0	0	0	28,020	0	0	0
150 SUNY Hlth Sci Ctr Brklyn	27,773	0	0	0	0	27,773	0	0	0
Total, 1st 150 insts.	19,167,931	2,931,959	1,901,950	1,230,934	824,967	10,801,825	305,272	825,267	345,757

See explanatory information and SOURCE at end of table.

Table B-39. R&D expenditures at universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
151 Unif Svcs U of Hlth Sci	27,334	0	0	0	0	27,334	0	0	0
152 US Naval Postgrad School	26,538	6,944	1,986	4,157	8,417	58	0	3,568	1,408
153 U Mississippi, All Camp	25,000	3,290	4,325	0	77	16,330	235	743	0
154 Florida A&M University	24,691	3,600	3,072	0	173	17,464	311	71	0
155 U PR Mayaguez	22,967	3,002	1,235	3,062	373	14,908	0	387	0
156 University of Notre Dame	22,833	6,120	12,569	0	895	2,704	355	107	83
157 U Arkansas Medical Sci	22,762	0	0	0	0	22,762	0	0	0
158 The University of Alabama	21,960	8,932	5,319	1,012	297	2,861	112	3,244	183
159 SUNY Col Env Sci Frstry	21,839	7,042	1,314	2,239	0	11,104	0	140	0
160 Michigan Tech University	21,786	14,714	1,938	1,279	240	2,953	0	458	204
Total, 1st 160 insts	19,405,641	2,985,603	1,933,708	1,242,683	835,439	10,920,303	306,285	833,985	347,635
161 Desert Research Institute	21,459	0	0	14,122	0	4,128	0	3,209	0
162 Wright State University	21,055	3,246	1,864	313	3,009	11,296	758	85	484
163 NM Inst Mining & Tech	20,945	14,617	1,690	3,845	536	226	18	13	0
164 Drexel University	20,886	12,143	1,800	1,566	2,125	991	0	2,261	0
165 Oregon Grad Inst Sci Tech	20,859	3,864	6,171	3,631	7,193	0	0	0	0
166 St Louis University	20,844	4	0	736	64	19,937	0	4	99
167 University of Louisville	20,475	1,547	1,918	566	375	14,815	46	1,208	0
168 Col of William & Mary	20,443	0	4,093	13,723	474	585	155	1,413	0
169 Howard University	19,836	3,258	3,109	0	325	10,398	1,162	1,212	372
170 U MD Center for EES	19,817	0	0	19,817	0	0	0	0	0
Total, 1st 170 insts	19,612,260	3,024,282	1,954,353	1,301,002	849,540	10,982,679	308,424	843,390	348,590
171 U of Missouri Rolla	19,706	14,015	3,183	863	465	843	0	12	325
172 U WI Milwaukee	19,180	3,563	3,405	2,987	490	2,232	447	5,235	821
173 Northeastern University	19,104	7,572	3,630	0	1,435	4,349	941	1,177	0
174 U of Nevada Las Vegas	19,031	2,549	1,594	10,123	1,970	1,960	7	828	0
175 George Mason University	18,871	7,003	2,888	0	3,551	1,452	550	3,427	0
176 CUNY City College	18,831	6,761	6,461	486	633	4,121	350	19	0
177 University North Dakota	18,732	10,433	180	1,465	0	4,051	3	1,356	1,244
178 New York Medical College	18,725	0	0	0	0	18,725	0	0	0
179 Med Col Hampton Roads	17,873	0	0	0	0	17,873	0	0	0
180 U PR Med Sci Campus	17,765	0	0	0	0	17,765	0	0	0
Total, 1st 180 insts	19,800,078	3,076,178	1,975,694	1,316,926	858,084	11,056,050	310,722	855,444	350,980
181 U TX Arlington	17,453	9,764	2,641	535	2,782	649	46	252	784
182 Georgia State University	17,100	0	4,716	290	1,245	4,713	2,998	2,406	732
183 University of Montana	16,908	0	908	391	2,841	10,687	28	756	1,297
184 University of Akron	16,783	5,969	8,325	172	741	1,154	121	301	0
185 Ohio University	16,425	8,606	1,883	95	66	4,666	212	211	686
186 SUNY Binghamton	15,803	2,713	2,084	982	1,650	2,403	3,318	2,653	0
187 U MA Lowell	15,155	5,926	5,419	75	526	2,471	149	411	178
188 Old Dominion University	14,911	5,415	1,674	5,061	887	1,381	47	446	0
189 U MD Biotechnology Inst	14,839	0	0	4,355	0	10,484	0	0	0
190 Med Col PA Hahnemann U	14,745	0	0	0	0	14,745	0	0	0
Total, 1st 190 insts	19,960,200	3,114,571	2,003,344	1,328,882	868,822	11,109,403	317,641	862,880	354,657
191 U TX Dallas	14,492	1,082	5,622	2,185	562	3,189	561	1,291	0
192 Mercer University	14,201	12,411	211	0	0	1,579	0	0	0
193 South Dakota State U	14,083	812	178	1,112	0	11,344	0	637	0
194 U of South Alabama	13,917	380	260	344	158	11,629	297	577	272
195 Colorado School of Mines	13,880	11,035	1,459	583	803	0	0	0	0
196 Brigham Young University	13,859	6,338	2,387	116	471	2,761	140	1,498	148
197 Western Illinois U	13,780	2,320	2,077	1,892	959	4,174	782	818	758
198 NC A&T State University	13,637	7,901	653	0	568	3,267	98	556	594
199 Florida International U	13,520	4,982	424	502	1,724	5,182	405	301	0
200 Stevens Inst of Tech	13,460	11,592	946	0	108	0	0	814	0
Total, 1st 200 insts	20,099,029	3,173,424	2,017,561	1,335,616	874,175	11,152,528	319,924	869,372	356,429
Total, all other sampled insts	778,492	128,530	127,513	51,398	49,625	294,031	30,576	69,631	27,188
Estimated total non-sampled insts	203,688	21,812	26,128	38,959	14,270	74,022	8,048	12,109	8,340

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-40. Federally financed R&D expenditures at universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Total, all institutions	12,661,121	1,972,753	1,565,197	949,005	668,592	6,758,287	242,547	359,318	145,422
1 Johns Hopkins U	711,692	207,014	114,099	39,196	119,145	223,732	949	4,431	3,126
2 University of Washington	281,033	11,149	15,489	55,009	5,901	177,093	6,931	6,747	2,714
3 MA Institute of Tech	270,718	109,258	83,188	12,353	14,236	32,121	7,398	3,639	8,525
4 Stanford University	268,559	81,762	40,075	5,085	13,304	124,208	3,182	943	0
5 U CA San Diego	266,166	11,561	29,855	81,240	8,671	130,681	3,231	927	0
6 University of Michigan	264,722	54,368	13,738	15,770	14,903	137,988	5,039	20,910	2,006
7 U WI Madison	225,403	34,375	29,656	15,148	7,531	113,254	8,870	16,504	65
8 U CA San Francisco	213,252	0	0	0	0	213,252	0	0	0
9 Columbia University	203,101	12,036	18,702	38,467	3,927	123,331	2,287	4,351	0
10 Cornell University	193,981	27,730	40,029	2,407	18,813	101,392	1,585	2,025	0
Total, 1st 10 insts	2,898,627	549,253	384,831	264,675	206,431	1,377,052	39,472	60,477	16,436
11 U CA Los Angeles	190,202	22,473	20,917	9,337	7,308	120,497	5,731	3,939	0
12 Harvard University	190,183	4,186	27,062	6,754	3,752	122,176	2,322	17,346	6,585
13 U of Pennsylvania	186,053	7,739	19,301	6	6,571	140,717	2,134	9,585	0
14 University of Minnesota	181,039	18,885	13,695	4,745	16,759	118,286	5,922	2,747	0
15 Yale University	171,425	4,946	17,009	1,878	4,649	139,449	2,660	834	0
16 Pennsylvania State U	168,679	85,836	13,994	11,742	2,241	45,118	3,458	3,653	2,637
17 University of Colorado	158,163	14,781	22,999	26,785	6,970	79,343	5,004	2,281	0
18 U CA Berkeley	152,528	33,108	45,382	2,861	3,943	57,209	4,455	4,218	1,352
19 University of Pittsburgh	152,138	5,324	10,263	241	2,059	126,263	2,219	4,612	1,157
20 U of Southern California	149,735	21,438	6,418	8,749	33,027	74,810	2,136	2,938	219
Total, 1st 20 insts	4,598,772	767,969	581,871	337,773	293,710	2,400,920	75,513	112,630	28,386
21 U TX Austin	149,586	61,596	44,574	9,932	9,371	15,924	3,265	4,195	729
22 U of NC Chapel Hill	149,047	0	7,263	6,654	6,894	112,974	2,356	12,906	0
23 Duke University	148,350	5,683	10,688	2,435	2,227	110,864	5,226	11,227	0
24 University of Arizona	145,696	10,734	57,541	7,815	5,117	59,396	1,072	2,780	1,241
25 University of IL Urbana	138,734	30,946	31,668	8,227	7,427	27,279	4,528	3,743	24,916
26 Washington University	138,299	2,563	6,139	2,532	4,874	120,518	817	856	0
27 Texas A&M University	136,942	22,788	10,613	62,565	3,081	33,685	710	3,397	103
28 University of Rochester	135,863	51,993	12,065	317	2,600	65,537	2,850	472	29
29 Ohio State University	113,186	17,182	14,305	4,860	3,743	58,037	1,076	11,201	2,782
30 U CA Davis	112,718	6,069	7,291	1,106	1,578	93,866	1,298	1,510	0
Total, 1st 30 insts	5,967,193	977,523	784,018	444,216	340,622	3,099,000	98,711	164,917	58,186
31 California Inst of Tech	112,502	20,799	49,691	13,481	6,394	20,863	0	721	553
32 University of Chicago	102,530	0	28,533	3,548	3,227	65,960	852	410	0
33 U of Iowa	99,536	10,074	11,327	369	912	74,873	627	1,354	0
34 U of Alabama Birmingham	98,719	1,086	776	15	192	95,778	700	172	0
35 Case Western Reserve U	97,302	15,489	4,077	260	264	75,771	431	1,010	0
36 Georgia Institute of Tech	97,075	62,671	10,222	4,742	11,919	2,505	738	3,539	739
37 Vanderbilt University	92,439	8,327	6,809	61	606	71,988	2,387	2,261	0
38 Baylor Col of Medicine	92,404	0	0	0	0	92,404	0	0	0
39 University of Miami	91,563	945	1,287	22,716	353	58,336	1,488	6,434	4
40 New York University	89,013	0	2,991	195	9,651	70,854	4,091	1,144	87
Total, 1st 40 insts	6,940,276	1,096,914	899,731	489,603	374,140	3,728,332	110,025	181,962	59,569
41 Emory University	88,735	0	4,091	0	379	81,787	1,130	1,348	0
42 Carnegie Mellon U	87,790	17,088	6,469	247	51,545	6,089	3,778	2,246	328
43 U MD College Park	86,051	22,912	30,017	5,511	8,473	9,435	1,097	8,606	0
44 University of Virginia	85,499	14,337	11,541	5,493	4,077	47,377	2,512	150	12
45 Northwestern University	83,684	13,578	9,078	565	4,348	46,146	1,539	640	7,790
46 U of Tennessee System	82,288	14,379	8,385	8,682	12,874	35,803	72	2,093	0
47 Purdue University	82,148	26,369	12,298	1,460	4,250	33,903	1,528	2,224	116
48 SUNY Buffalo	81,814	6,530	5,114	380	4,693	62,175	1,659	1,163	100
49 Indiana University	81,657	151	20,065	1,106	2,940	50,302	4,182	1,191	1,720
50 University of Utah	81,263	10,632	8,168	3,514	7,473	50,386	771	319	0
Total, 1st 50 insts	7,781,205	1,222,890	1,014,957	516,561	475,192	4,151,735	128,293	201,942	69,635

See explanatory information and SOURCE at end of table.

Table B-40. Federally financed R&D expenditures at universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
51 University of Florida	79,630	14,070	5,775	1,648	2,981	51,781	1,445	1,516	414
52 Woods Hole Oceanograph	74,219	16,081	0	58,138	0	0	0	0	0
53 Michigan State University	73,855	8,501	13,818	266	1,676	42,179	1,603	5,177	635
54 VA Polytech Inst & St U	73,490	21,304	4,448	28,812	2,413	14,008	1,248	1,257	0
55 SUNY Stony Brook	72,673	2,452	15,569	9,836	4,079	37,088	2,413	1,236	0
56 Boston University	72,551	5,881	8,545	845	2,716	51,295	126	660	2,483
57 U TX SW Med Ctr Dallas	71,468	0	0	0	0	71,468	0	0	0
58 Yeshiva University	70,718	0	0	0	0	70,718	0	0	0
59 NC State U Raleigh	69,608	26,734	6,494	4,638	2,630	27,879	192	1,041	0
60 Rutgers the State U NJ	68,149	13,601	9,161	4,110	7,566	23,741	2,833	7,094	43
Total, 1st 60 insts.	8,507,566	1,331,514	1,078,767	624,854	499,253	4,541,892	138,153	219,923	73,210
61 U CA Irvine	67,245	4,478	12,975	772	3,397	42,142	683	2,798	0
62 Colorado State University	66,464	7,157	5,558	8,959	932	35,455	1,934	1,301	5,168
63 Oregon State University	65,069	4,983	2,932	21,983	1,195	32,480	108	957	431
64 U MD Baltimore Prof Sch	59,727	0	0	0	0	59,727	0	0	0
65 New Mexico State U	59,632	36,840	2,357	8,262	2,181	7,971	26	552	1,443
66 U CA Santa Barbara	59,336	24,538	15,095	6,959	4,177	2,308	2,142	4,117	0
67 Princeton University	58,544	13,833	17,382	4,837	6,381	10,058	4,087	1,966	0
68 University of IL Chicago	57,074	3,452	4,960	161	1,833	43,159	1,104	1,030	1,375
69 Iowa State University	56,439	20,444	3,706	524	1,842	24,726	178	4,778	241
70 University of Cincinnati	56,361	11,264	3,050	238	437	39,706	188	303	1,175
Total, 1st 70 insts.	9,113,457	1,458,503	1,146,782	677,549	521,628	4,839,624	148,603	237,725	83,043
71 CUNY Mt Sinai Sch Med	55,188	0	0	0	0	55,188	0	0	0
72 University of Georgia	55,005	1,116	2,989	2,063	1,323	43,577	2,589	1,348	0
73 Georgetown University	54,992	0	3,757	593	493	47,943	67	1,934	205
74 Louisiana St U, All Camp	52,064	4,957	6,011	7,308	362	32,301	307	789	29
75 University of New Mexico	51,780	21,572	2,397	1,560	1,082	18,573	1,480	1,244	3,872
76 U TX Hlth Sci Ctr San Ant	51,671	0	0	0	0	51,671	0	0	0
77 Tufts University	49,672	2,419	2,176	0	139	43,115	1,172	651	0
78 University of Kentucky	48,801	6,047	2,064	194	817	36,168	776	1,238	1,497
79 University of Connecticut	48,286	4,381	919	3,771	838	33,986	2,979	1,412	0
80 Virginia Commonwealth U	47,923	10	1,705	0	70	45,295	700	143	0
Total, 1st 80 insts.	9,628,839	1,499,005	1,168,800	693,038	526,752	5,247,441	158,673	246,484	88,646
81 U TX Hlth Sci Ctr Houston	46,821	0	0	0	0	45,962	0	859	0
82 Utah State University	46,128	21,917	4,261	5,541	211	10,999	1,327	771	1,101
83 Washington State U	45,513	5,575	3,793	292	274	21,718	151	4,211	9,499
84 Oregon Health Sciences U	43,629	0	0	0	0	40,980	2,649	0	0
85 Wayne State University	43,354	2,338	3,769	0	352	35,208	1,470	217	0
86 Thomas Jefferson U	43,215	0	0	0	0	43,215	0	0	0
87 U TX MD Anderson Cncr	42,416	0	2,410	0	434	39,572	0	0	0
88 Tulane University	42,354	3,508	1,362	24	420	30,968	218	5,581	273
89 Dartmouth College	41,762	4,711	2,389	823	699	31,791	992	243	114
90 University of Kansas	40,816	3,731	3,282	888	628	25,134	851	176	6,126
Total, 1st 90 insts.	10,064,847	1,540,785	1,190,066	700,606	529,770	5,572,988	166,331	258,542	105,759
91 U of Alaska Fairbanks	40,770	818 i	10,099 i	22,985 i	23 i	6,265 i	0 i	580 i	0 i
92 U Med & Dent NJ	40,687	0	0	0	0	40,687	0	0	0
93 University of Dayton	39,994	35,344	1,514	151	430	395	1,926	221	13
94 Rockefeller University	39,990	0	3,851	0	145	35,994	0	0	0
95 Florida State University	39,775	672	26,863	5,946	983	3,328	1,408	575	0
96 University Hawaii Manoa	39,392	1,559	14,828	5,169	998	13,801	322	586	2,129
97 U of South Carolina	37,918	6,665	5,351	3,456	4,832	9,776	959	3,575	3,304
98 Brown University	36,864	6,288	4,171	4,275	5,746	14,561	1,033	790	0
99 Wake Forest University	36,722	0	896	0	63	35,720	0	0	43
100 University of Oklahoma	35,266	4,340	3,634	4,702	1,364	15,142	1,934	4,150	0
Total, 1st 100 insts.	10,452,225	1,596,471	1,261,273	747,290	544,354	5,748,657	173,913	269,019	111,248

See explanatory information and SOURCE at end of table.

Table B-40. Federally financed R&D expenditures at universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
101 U MA Worcester	34,923	0	0	0	0	34,923	0	0	0
102 West Virginia University	34,622	8,537	1,410	5,896	3,132	13,928	8	412	1,299
103 Mississippi State U	33,918	12,470	2,931	3,050	382	12,346	0	1,020	1,719
104 University of Vermont	33,695	1,023	670	49	72	30,901	430	0	550
105 U of Rhode Island	33,025	3,292 i	822 i	19,574 i	202 i	3,526 i	3,073 i	2,077 i	459 i
106 U TX Med Br Galveston	32,775	0	0	0	0	32,775	0	0	0
107 U MA Amherst	32,730	4,811	9,064	2,102	7,948	6,655	2,054	96	0
108 SUNY Albany	32,511	0	1,171	3,467	462	22,203	2,983	2,225	0
109 Medical Col of Wisconsin	31,459	0	0	0	0	31,459	0	0	0
110 U of Missouri Columbia	31,299	3,063	1,419	164	412	22,627	944	2,650	20
Total, 1st 110 insts.	10,783,182	1,629,667	1,278,760	781,592	556,964	5,960,000	183,405	277,499	115,295
111 Arizona State University	30,699	6,637	10,651	3,158	1,327	4,616	2,027	2,214	69
112 U of Nebraska Lincoln	29,781	2,054	4,303	1,702	444	20,352	408	416	102
113 Med U of South Carolina	28,507	0	0	0	0	28,507	0	0	0
114 Temple University	27,140	123	600	0	386	18,588	3,475	3,805	163
115 University of Delaware	26,250	6,926	6,288	4,927	2,926	2,556	363	2,264	0
116 US Naval Postgrad School	26,225	6,833	1,930	4,061	8,417	58	0	3,565	1,361
117 Rice University	25,672	2,516	7,276	2,759	9,603	3,160	304	54	0
118 U of New Hampshire	25,032	1,706	1,115	15,716	522	4,306	413	1,253	1
119 George Washington U	24,379	5,165	721	73	5,449	9,637	513	2,623	198
120 Clemson University	24,133	7,581	1,694	235	1,156	11,038	74	1,847	508
Total, 1st 120 insts.	11,051,000	1,669,208	1,313,338	814,223	587,194	6,062,818	190,982	295,540	117,697
121 U CA Santa Cruz	23,802	0	9,558	6,005	1,043	4,438	450	2,308	0
122 U CA Riverside	23,743	393	5,631	2,178	561	13,859	967	154	0
123 Loyola U of Chicago	23,587	0	378	0	1,490	20,975	0	744	0
124 University of Houston	22,830	9,832	4,865	472	773	4,123	2,209	502	54
125 University of Oregon	22,204	1,514	8,536	1,047	1,675	7,218	1,322	892	0
126 Rensselaer Polytech Inst	22,090	15,390	3,955	685	1,408	341	35	155	121
127 Brandeis University	21,585	0	3,040	0	829	11,385	1,336	4,995	0
128 U of Alabama Huntsville	21,583	8,225	5,398	3,958	2,794	119	0	1	1,088
129 Kansas State University	21,547	3,067	4,362	143	331	12,802	128	356	358
130 Florida A&M University	20,730	3,148	2,936	0	157	14,160	311	18	0
Total, 1st 130 insts.	11,274,701	1,710,777	1,361,997	828,711	598,255	6,152,238	197,740	305,665	119,318
131 Oklahoma State University	20,440	8,773	2,761	208	301	7,572	11	654	160
132 U of South Florida	19,910	4,057	662	5,476	71	7,286	1,838	520	0
133 Syracuse University	19,309	5,832	3,752	988	2,012	4,341	468	1,454	462
134 U of Nevada Reno	18,799	4,640	678	3,659	36	8,451	114	432	789
135 Auburn University	18,347	7,151	1,253	88	643	8,660	306	192	54
136 Unif Svcs U of Hlth Sci	18,124	0	0	0	0	18,124	0	0	0
137 St Louis University	18,120	4	0	736	64	17,316	0	0	0
138 SUNY Hlth Sci Ctr Brklyn	16,695	0	0	0	0	16,695	0	0	0
139 University North Dakota	16,660	9,569	148	1,097	0	3,619	3	1,133	1,091
140 University of Idaho	16,586	1,701	1,750	810	55	11,942	0	328	0
Total, 1st 140 insts.	11,457,691	1,752,504	1,373,001	841,773	601,437	6,256,244	200,480	310,378	121,874
141 University of Notre Dame	16,358	3,414	10,557	0	452	1,584	283	58	10
142 The Medical Col of PA	16,130	0	0	0	0	16,130	0	0	0
143 U Arkansas Main	16,040	3,675	2,014	819	36	8,606	1	524	365
144 Northeastern University	16,037	6,823	3,337	0	1,417	3,201	922	337	0
145 U Mississippi, All Camp	15,836	2,178	3,400	0	72	9,444	195	547	0
146 Montana State University	15,738	2,533	2,893	221	341	9,035	0	561	154
147 Lehigh University	15,363	10,999	2,988	852	98	228	151	47	0
148 Desert Research Institute	15,272	0	0	9,599	0	2,567	0	3,106	0
149 Howard University	15,196	2,436	2,767	0	311	7,419	838	1,068	357
150 University of Wyoming	15,115	558	1,737	3,638	307	8,428	219	189	39
Total, 1st 150 insts.	11,614,776	1,785,120	1,402,694	856,902	604,471	6,322,886	203,089	316,815	122,799

See explanatory information and SOURCE at end of table.

Table B-40. Federally financed R&D expenditures at universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
151 New York Medical College	14,913	0	0	0	0	14,913	0	0	0
152 Rush University	14,831	0	0	0	0	13,410	1,421	0	0
153 CUNY City College	13,585	3,178	5,811	382	585	3,342	273	14	0
154 U Arkansas Medical Sci	13,410	0	0	0	0	13,410	0	0	0
155 U of Central Florida	13,276	1,400	3,416	795	569	504	256	109	6,227
156 George Mason University	12,679	5,145	2,361	0	2,805	499	276	1,593	0
157 NJ Inst of Technology	12,572	3,393	731	2,535	754	0	0	183	4,976
158 San Diego St University	12,268	1,587	942	311	153	6,066	2,536	413	260
159 U of NE Med Ctr Omaha	12,256	0	0	0	0	12,256	0	0	0
160 U PR Med Sci Campus	11,973	0	0	0	0	11,973	0	0	0
Total, 1st 160 insts.	11,746,539	1,799,823	1,415,955	860,925	609,337	6,399,259	207,851	319,127	134,262
161 The University of Alabama	11,482	5,214	2,954	229	203	1,837	87	845	113
162 U of Maine	11,386	663	458	4,223	42	4,943	288	769	0
163 Texas Tech University	11,360	2,325	1,043	178	487	6,100	40	1,187	0
164 Mercer University	11,115	10,434	0	0	0	681	0	0	0
165 Clark Atlanta University	11,025	1,220	3,437	117	1,782	4,331	0	138	0
166 Drexel University	11,006	6,828	1,142	1,448	474	706	0	408	0
167 Michigan Tech University	10,984	6,407	1,566	799	203	1,816	0	193	0
168 Florida International U	10,936	4,349	276	446	1,597	3,610	380	278	0
169 North Dakota State U	10,877	1,665	1,847	132	553	5,414	324	850	92
170 Oregon Grad Inst Sci Tech	10,458	1,547	3,346	1,425	4,140	0	0	0	0
Total, 1st 170 insts.	11,857,168	1,840,475	1,432,024	869,922	618,818	6,428,697	208,970	323,795	134,467
171 Col of William & Mary	10,426	0	3,652	5,831	433	273	16	221	0
172 Med Col PA Hahnemann U	10,194	0	0	0	0	10,194	0	0	0
173 Med Col Hampton Roads	10,162	0	0	0	0	10,162	0	0	0
174 Meharry Medical College	10,154	0	0	1,561	0	8,593	0	0	0
175 NC A&T State University	10,132	5,667	509	0	510	2,948	98	307	93
176 Sthrn IL U Carbondale	9,931	1,238	391	335	100	6,037	309	471	1,050
177 Wright State University	9,624	1,418	1,054	30	441	6,225	456	0	0
178 Worcester Polytech Inst	9,584	3,753	207	0	5,408	129	0	87	0
179 U of Nevada Las Vegas	9,543	1,443	637	4,344	1,587	1,381	0	151	0
180 U PR Mayaguez	9,369	1,361	626	2,217	194	4,584	0	387	0
Total, 1st 180 insts.	11,956,287	1,855,355	1,439,100	884,240	627,491	6,479,223	209,849	325,419	135,610
181 University of Louisville	9,274	637	1,613	179	289	6,369	35	152	0
182 Medical Col of Georgia	9,121	0	0	0	0	9,121	0	0	0
183 U TX El Paso	9,085	2,907	671	1,087	561	2,628	72	1,159	0
184 Western Illinois U	8,983	1,687	1,433	1,004	720	2,866	653	409	211
185 Alabama A&M University	8,954	404	4,883	0	0	3,553	0	114	0
186 U of South Alabama	8,838	49	80	139	144	7,804	245	185	192
187 Med Col of Ohio Toledo	8,726	0	0	0	0	8,726	0	0	0
188 University of Montana	8,675	0	482	158	2,414	5,456	0	165	0
189 Albany Medical College	8,344	0	0	0	0	8,344	0	0	0
190 Colorado School of Mines	8,161	6,298	1,278	361	224	0	0	0	0
Total, 1st 190 insts.	12,044,448	1,867,337	1,449,540	887,168	631,843	6,534,090	210,854	327,603	136,013
191 Brigham Young University	8,126	4,530	1,058	105	240	1,362	80	622	129
192 U WI Milwaukee	7,977	1,406	1,721	1,260	41	868	202	2,332	147
193 Boston College	7,938	0	2,524	499	3,792	853	126	144	0
194 Old Dominion University	7,888	4,050	1,218	984	811	511	42	272	0
195 C R Drew U of Med & Sci	7,674	0	0	0	0	7,674	0	0	0
196 Stevens Inst of Tech	7,644	6,623	719	0	0	0	0	302	0
197 NM Inst Mining & Tech	7,582	5,445	731	1,185	41	180	0	0	0
198 U Southern Mississippi	7,291	99	3,842	927	147	715	0	178	1,383
199 U MA Lowell	7,281	2,525	3,936	74	186	436	28	82	14
200 U TX Dallas	7,224	138	4,612	517	147	1,531	230	49	0
Total, 1st 200 insts.	12,121,073	1,892,153	1,469,901	892,719	637,248	6,548,220	211,562	331,584	137,686
Total, all other sampled insts.	425,929	65,874	76,760	35,277	21,603	173,354	23,872	22,726	6,463
Estimated total non-sampled insts.	114,119	14,726	18,536	21,009	9,741	36,713	7,113	5,008	1,273

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-41. Non-Federal R&D expenditures at universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Total, all institutions	8,420,087	1,351,014	606,005	476,967	269,478	4,762,294	116,000	591,794	246,534
1 Texas A&M University	218,808	59,777	11,277	18,313	3,882	107,445	860	14,150	3,104
2 U WI Madison	167,315	20,646	10,182	6,750	2,500	109,228	2,670	14,524	815
3 University of Michigan	166,056	34,469	9,234	5,053	4,283	74,210	4,059	30,184	4,564
4 U CA Berkeley	137,104	28,546	14,614	1,605	893	64,973	2,162	20,612	3,699
5 University of Minnesota	136,826	11,740	2,107	6,815	5,056	100,955	1,048	9,105	0
6 Pennsylvania State U	134,318	43,477	8,492	9,618	1,277	51,402	2,935	6,756	10,361
7 University of Georgia	132,844	3,951	5,669	6,363	5,290	87,272	3,415	20,884	0
8 University of Arizona	124,243	9,925	34,224	13,046	2,179	56,806	1,474	5,886	703
9 Cornell University	118,702	13,686	5,182	1,982	4,801	83,033	2,085	7,933	0
10 U CA Davis	117,429	8,640	1,070	225	152	105,772	117	1,453	0
Total, 1st 10 insts.	1,453,645	234,857	102,051	69,770	30,313	841,096	20,825	131,487	23,246
11 Ohio State University	117,329	33,980	5,529	2,784	7,329	59,257	441	5,017	2,992
12 Louisiana St U, All Camp	113,793	17,824	4,800	13,229	1,368	70,656	167	4,651	1,098
13 U MD College Park	112,297	24,644	26,364	3,421	11,376	20,906	2,702	22,884	0
14 U TX Austin	111,016	45,147	19,534	15,894	6,526	7,660	696	11,988	3,571
15 University of IL Urbana	106,673	20,688	6,832	18,825	7,968	28,240	1,777	10,353	11,990
16 Rutgers the State U NJ	105,062	11,788	7,960	5,788	6,196	54,643	3,997	10,957	3,733
17 NC State U Raleigh	103,799	32,137	2,885	5,013	3,021	58,440	64	2,239	0
18 Iowa State University	99,543	23,708	3,058	394	7,419	54,794	585	5,660	3,925
19 U CA San Francisco	99,141	0	0	0	0	99,141	0	0	0
20 Georgia Institute of Tech	96,555	62,333	10,168	4,717	11,856	2,491	735	3,521	734
Total, 1st 20 insts.	2,518,853	507,106	189,181	139,835	93,372	1,297,324	31,989	208,757	51,289
21 Northwestern University	95,794	8,052	3,387	224	9,589	41,846	174	1,184	31,338
22 Baylor Col of Medicine	94,461	0	0	0	0	94,461	0	0	0
23 MA Institute of Tech	93,200	44,272	11,966	3,741	4,278	5,569	1,105	4,540	17,729
24 Purdue University	90,585	21,440	6,474	621	2,613	50,124	840	8,392	81
25 U of Missouri Columbia	89,957	9,318	7,302	1,484	436	64,225	1,397	5,774	21
26 U CA Los Angeles	89,667	7,071	3,152	4,793	983	57,517	1,783	14,368	0
27 Michigan State University	89,430	9,722	9,820	165	4,743	59,148	700	4,176	956
28 University of Connecticut	88,454	25,180	2,900	3,843	2,107	41,308	4,461	6,967	1,688
29 University of Florida	88,369	16,150	6,957	3,313	2,171	54,194	1,431	3,467	686
30 Harvard University	88,276e	1,841e	4,656e	2,960e	417e	45,967e	795e	29,134e	2,506e
Total, 1st 30 insts.	3,427,046	650,152	245,795	160,979	120,709	1,811,683	44,675	286,759	106,294
31 U TX MD Anderson Cncr	79,941	0	702	0	1,662	77,577	0	0	0
32 VA Polytech Inst & St U	74,823	22,319	4,739	3,969	1,383	37,937	783	3,693	0
33 U of Nebraska Lincoln	72,965	12,511	2,232	3,449	853	50,848	573	2,414	85
34 Johns Hopkins U	72,351	3,508	3,089	1,397	152	46,582	72	5,353	12,198
35 Duke University	71,870	1,957	1,635	865	599	63,462	879	2,349	124
36 U of Tennessee System	71,052	15,508	5,145	4,387	3,682	38,063	91	2,990	1,186
37 University of Colorado	69,904	11,885	12,006	9,251	4,628	28,070	2,419	1,552	93
38 U of South Florida	66,276	7,640	1,275	3,359	271	48,763	3,552	1,416	0
39 U CA San Diego	65,735	4,245	5,595	21,026	4,871	26,043	767	3,188	0
40 U of Pennsylvania	65,408	4,179	3,944	795	1,837	42,785	162	11,706	0
Total, 1st 40 insts.	4,137,371	733,904	286,157	209,477	140,647	2,271,813	53,973	321,420	119,980
41 University of Washington	62,877	9,183	3,886	2,903	615	41,905	390	3,928	67
42 University of Oklahoma	60,481	9,719	4,932	7,953	2,043	28,438	1,373	6,023	0
43 SUNY Buffalo	59,278	16,741	2,994	466	2,690	29,536	3,948	2,846	57
44 Yale University	58,950	2,055	2,119	421	693	47,326	4,547	1,789	0
45 U of Southern California	57,540	5,423	596	2,842	1,986	42,335	310	2,592	1,456
46 U of Iowa	57,500	7,767	3,242	1,219	456	39,791	387	3,879	759
47 Auburn University	57,391	14,148	2,541	393	339	36,154	21	1,007	2,788
48 University of Kentucky	56,738	10,853	358	24	229	42,003	0	544	2,727
49 University of IL Chicago	56,667	4,912	2,504	785	648	40,685	567	2,535	4,031
50 Indiana University	54,960	739	9,197	1,244	1,209	31,186	1,066	4,084	6,235
Total, 1st 50 insts.	4,719,753	815,444	318,526	227,727	151,555	2,651,172	66,582	350,647	138,100

See explanatory information and SOURCE at end of table.

Table B-41. Non-Federal R&D expenditures at universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

Page 2 of 4

Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
51 University of Kansas	54,885	3,547	5,129	6,854	101	32,352	535	2,129	4,238
52 Oregon State University	54,703	7,124	1,222	3,757	885	39,760	2	1,812	141
53 Washington University	54,079	1,701	1,931	973	1,417	47,934	5	118	0
54 U of NC Chapel Hill	52,575	0	2,152	4,759	2,510	37,475	371	5,308	0
55 Clemson University	52,439	16,474	3,682	506	2,511	23,986	162	4,014	1,104
56 Wayne State University	51,278	5,366	5,757	0	317	33,951	751	3,444	1,692
57 U MD Baltimore Prof Sch	51,139	0	0	0	0	51,139	0	0	0
58 Oklahoma State University	50,368	10,980	4,247	1,682	602	28,179	151	3,469	1,058
59 New York University	50,189	0	475	481	3,297	39,664	595	4,692	985
60 Stanford University	50,002	11,184	3,955	1,107	1,209	27,896	528	4,123	0
Total, 1st 60 insts.	5,241,410	871,820	347,076	247,846	164,404	3,013,508	69,682	379,756	147,318
61 Washington State U	48,653	3,610	2,039	393	199	34,200	131	7,776	305
62 Emory University	47,608	0	1,404	2	72	39,796	269	6,065	0
63 U TX SW Med Ctr Dallas	46,930	0	0	0	0	46,930	0	0	0
64 U Med & Dent NJ	46,179	0	0	0	0	46,179	0	0	0
65 Colorado State University	45,993	9,280	2,182	2,473	779	26,741	177	2,710	1,651
66 University of Virginia	45,851	7,205	3,103	1,160	782	29,065	572	3,908	56
67 Kansas State University	44,149	6,288	873	94	520	33,258	444	1,841	831
68 U of Alabama Birmingham	43,016	4,976	321	0	24	37,509	132	54	0
69 Mississippi State U	42,283	5,466	569	537	3	29,476	0	2,431	3,801
70 U Arkansas Main	41,775	6,545	1,847	1,096	801	28,336	471	2,517	162
Total, 1st 70 insts.	5,693,847	915,190	359,414	253,601	167,584	3,364,998	71,878	407,058	154,124
71 Tulane University	41,531	5,321	1,582	216	324	30,354	582	2,820	332
72 Princeton University	40,743	10,621	8,081	3,353	2,180	6,181	2,194	8,133	0
73 SUNY Stony Brook	40,578	1,789	7,610	6,095	2,220	19,861	613	2,245	145
74 University of Pittsburgh	40,327	2,847	1,916	29	474	31,036	159	3,809	57
75 U TX Med Br Galveston	39,998	0	0	0	0	39,998	0	0	0
76 University of New Mexico	38,535	14,699	2,042	707	1,446	11,891	521	3,930	3,299
77 Utah State University	37,630	3,531	1,616	9,371	231	15,320	337	1,245	5,979
78 U CA Irvine	37,533	5,276	1,413	374	865	27,960	46	1,599	0
79 U CA Riverside	37,252	89	565	984	409	34,509	77	619	0
80 University of Cincinnati	37,238	8,166	1,686	113	149	25,763	232	237	892
Total, 1st 80 insts.	6,085,212	967,529	385,925	274,843	175,882	3,607,871	76,639	431,695	164,828
81 Florida State University	36,813	883	19,362	5,806	976	4,762	1,517	3,507	0
82 U of South Carolina	36,083	6,794	2,295	10,135	1,438	9,125	350	3,871	2,075
83 Case Western Reserve U	35,970	9,370	1,345	55	37	22,231	84	2,848	0
84 U of Alaska Fairbanks	35,323	2,666i	5,366i	12,853i	67i	11,788i	0i	2,583i	0i
85 Carnegie Mellon U	34,790	11,065	1,082	1,464	10,181	5,508	1,847	2,807	836
86 Rockefeller University	34,468	0	2,177	0	1,146	31,145	0	0	0
87 Columbia University	33,316	2,371	2,731	1,319	710	24,769	99	1,317	0
88 University of Idaho	32,752	5,602	1,614	1,865	102	22,918	66	585	0
89 U MA Amherst	32,614	5,151	6,771	4,284	4,756	10,574	493	446	139
90 Arizona State University	31,864	12,918	6,165	288	737	3,224	901	5,337	2,294
Total, 1st 90 insts.	6,429,205	1,024,349	434,833	312,912	196,032	3,753,915	81,996	454,996	170,172
91 U TX Hlth Sci Ctr San Ant	31,864	0	0	0	0	31,864	0	0	0
92 University of Rochester	31,622	3,787	1,061	65	194	22,830	3,151	63	471
93 CUNY Mt Sinai Sch Med	30,991	0	0	0	0	30,991	0	0	0
94 University Hawaii Manoa	30,687	844	5,395	2,972	153	15,788	212	2,672	2,651
95 University of Miami	29,912	738	43	2,812	205	25,682	191	218	23
96 Temple University	29,168	277	496	17	159	21,282	941	5,741	255
97 Virginia Commonwealth U	28,674	289	1,108	0	167	25,274	661	1,175	0
98 Texas Tech University	28,095	7,188	3,027	839	707	13,918	34	1,954	428
99 U of Central Florida	28,086	9,347	4,360	8,114	410	443	264	267	4,881
100 Georgetown University	27,669	0	1,150	122	222	24,496	14	1,623	42
Total, 1st 100 insts.	6,725,973	1,046,819	451,473	327,853	198,249	3,966,483	87,464	468,709	178,923

See explanatory information and SOURCE at end of table.

Table B-41. Non-Federal R&D expenditures at universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
101 U MA Worcester	26,867	0	0	0	0	26,867	0	0	0
102 SUNY Albany	26,611	0	2,130	3,309	244	15,793	1,056	4,079	0
103 North Dakota State U	26,100	1,525	2,837	73	385	19,586	258	1,326	110
104 Rush University	24,905	0	0	0	0	22,894	2,011	0	0
105 University of Delaware	24,484	7,742	2,705	2,227	869	9,505	219	1,217	0
106 Tufts University	24,077	2,102	1,014	1	52	18,553	478	1,877	0
107 West Virginia University	23,982	4,571	324	1,424	2,229	13,126	59	1,912	337
108 U of Nevada Reno	23,377	2,460	908	430	65	8,797	191	928	9,598
109 University of Utah	22,508	5,004	1,047	1,356	1,076	13,610	262	153	0
110 Yeshiva University	22,163	0	0	0	0	22,163	0	0	0
Total, 1st 110 insts.	6,971,047	1,070,223	462,438	336,673	203,169	4,137,377	91,998	480,201	188,968
111 U of NE Med Ctr Omaha	21,741	0	0	0	0	21,741	0	0	0
112 New Mexico State U	20,654	6,415	373	1,323	712	11,356	36	259	180
113 Sthrn IL U Carbondale	20,566	3,291	1,328	451	2,564	8,535	66	1,082	3,249
114 Montana State University	20,411	2,226	964	167	134	15,804	0	977	139
115 University of Houston	20,301	12,129	3,890	907	536	1,507	764	560	8
116 Oregon Health Sciences U	20,246	0	0	0	0	19,891	355	0	0
117 U TX Hlth Sci Ctr Houston	19,611	0	0	0	0	19,276	0	335	0
118 University of Chicago	19,372	0	3,438	243	186	12,863	454	2,188	0
119 Syracuse University	19,341	7,382	2,144	306	6,213	563	507	1,759	467
120 Medical Col of Georgia	18,899	0	0	0	0	18,899	0	0	0
Total, 1st 120 insts.	7,172,189	1,101,666	474,575	340,070	213,514	4,267,812	94,180	487,361	193,011
121 University of Wyoming	18,705	1,602	867	3,986	184	8,539	48	87	3,392
122 U of New Hampshire	18,675	1,845	354	7,300	251	4,674	45	1,062	3,144
123 U CA Santa Cruz	18,655	0	10,203	3,438	330	2,876	265	1,543	0
124 SUNY Col Env Sci Frstry	18,488	6,753	988	2,014	0	8,636	0	97	0
125 Brown University	18,282	2,262	3,321	927	2,724	6,976	574	1,498	0
126 Medical Col of Wisconsin	18,145	0	0	0	0	18,145	0	0	0
127 University of Vermont	18,080	930	268	16	57	15,641	357	24	787
128 U of Maine	18,007	2,674	419	2,697	4	10,921	40	1,252	0
129 Boston University	17,953	1,851	1,156	323	45	12,990	62	642	884
130 Med U of South Carolina	17,742	0	0	0	0	17,742	0	0	0
Total, 1st 130 insts.	7,354,921	1,119,583	492,151	360,771	217,109	4,374,952	95,571	493,566	201,218
131 Vanderbilt University	17,666	2,252	1,247	16	167	11,971	593	1,420	0
132 NJ Inst of Technology	17,411	5,559	1,080	5,148	1,520	0	0	119	3,985
133 San Diego St University	17,041	769	494	222	622	9,355	746	985	3,848
134 Dartmouth College	16,083	1,834	639	716	244	12,078	0	423	149
135 Wake Forest University	15,859	0	281	0	1	15,370	0	0	207
136 California Inst of Tech	15,444	2,294	4,848	1,369	231	4,807	0	37	1,858
137 Rensselaer Polytech Inst	15,101	10,622	2,461	407	1,175	222	24	96	94
138 U MD Center for EES	14,365	0	0	14,365	0	0	0	0	0
139 The Medical Col of PA	14,343	0	0	0	0	14,343	0	0	0
140 U CA Santa Barbara	14,283	3,939	1,989	2,830	1,533	825	710	2,345	112
Total, 1st 140 insts.	7,512,517	1,146,852	505,190	385,844	222,602	4,443,923	97,644	498,991	211,471
141 George Washington U	14,050	1,186	180	68	583	6,919	237	4,603	274
142 Lehigh University	13,825	10,796	1,676	294	259	432	159	209	0
143 Thomas Jefferson U	13,717	0	0	0	0	13,717	0	0	0
144 U of Rhode Island	13,606	2,123 i	327 i	2,960 i	76 i	6,632 i	377 i	696 i	415 i
145 U PR Mayaguez	13,598	1,641	609	845	179	10,324	0	0	0
146 NM Inst Mining & Tech	13,363	9,172	959	2,660	495	46	18	13	0
147 Brandeis University	13,250	0	696	0	303	4,422	242	7,587	0
148 Loyola U of Chicago	13,243	0	155	0	460	11,134	175	1,019	300
149 U of Missouri Rolla	13,234	9,262	2,038	754	145	699	0	11	325
150 U TX Arlington	12,816	7,483	1,784	136	2,178	348	24	213	650
Total, 1st 150 insts.	7,647,219	1,188,515	513,614	393,561	227,280	4,498,596	98,876	513,342	213,435

See explanatory information and SOURCE at end of table.

Table B-41. Non-Federal R&D expenditures at universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
151 University of Akron	12,767	4,694	6,567	143	300	670	101	292	0
152 Wright State University	11,431	1,828	810	283	2,568	5,071	302	85	484
153 U WI Milwaukee	11,203	2,157	1,684	1,727	449	1,364	245	2,903	674
154 University of Louisville	11,201	910	305	387	86	8,446	11	1,056	0
155 SUNY Hlth Sci Ctr Brklyn	11,078	0	0	0	0	11,078	0	0	0
156 Michigan Tech University	10,802	8,307	372	480	37	1,137	0	265	204
157 SUNY Binghamton	10,703	1,990	1,252	427	1,203	1,544	1,955	2,332	0
158 Ohio University	10,589	5,595	823	53	48	3,574	109	162	225
159 The University of Alabama	10,478	3,718	2,365	783	94	1,024	25	2,399	70
160 Oregon Grad Inst Sci Tech	10,401	2,317	2,825	2,206	3,053	0	0	0	0
Total, 1st 160 insts	7,757,872	1,220,031	530,617	400,050	235,118	4,532,504	101,624	522,836	215,092
161 Georgia State University	10,329	0	2,478	196	1,167	2,419	1,191	2,146	732
162 Col of William & Mary	10,017	0	441	7,892	41	312	139	1,192	0
163 U of Alabama Huntsville	9,899	4,411	2,407	917	1,798	72	0	8	286
164 Drexel University	9,880	5,315	658	118	1,651	285	0	1,853	0
165 U of Nevada Las Vegas	9,488	1,106	957	5,779	383	579	7	677	0
166 U Arkansas Medical Sci	9,352	0	0	0	0	9,352	0	0	0
167 Memphis State University	9,278	1,259	192	1,760	202	1,112	1,826	1,806	1,121
168 Unif Svcs U of Hlth Sci	9,210	0	0	0	0	9,210	0	0	0
169 U Mississippi, All Camp	9,164	1,112	925	0	5	6,886	40	196	0
170 U of Southwestern LA	9,101	3,084	518	34	2,490	1,313	108	903	651
Total, 1st 170 insts	7,853,590	1,236,318	539,193	416,746	242,855	4,564,044	104,935	531,617	217,882
171 Rochester Inst of Tech	9,050	462 i	0 i	0 i	5 i	563 i	0 i	0 i	8,020 i
172 University of Oregon	8,966	567	3,587	556	509	1,996	695	1,056	0
173 U MD Biotechnology Inst	8,760	0	0	1,801	0	6,959	0	0	0
174 U MA Boston	8,580	0	102	1,649	14	690	98	6,027	0
175 South Dakota State U	8,372	526	79	438	0	6,919	0	410	0
176 University of Montana	8,233	0	426	233	427	5,231	28	591	1,297
177 Tennessee Tech U	8,149	7,174	207	40	17	678	0	33	0
178 U MA Lowell	7,874	3,401	1,483	1	340	2,035	121	329	164
179 University of Dayton	7,774	6,390	606	8	33	84	23	204	426
180 Med Col Hampton Roads	7,711	0	0	0	0	7,711	0	0	0
Total, 1st 180 insts	7,937,059	1,254,838	545,683	421,472	244,200	4,596,910	105,900	540,267	227,789
181 Rice University	7,637	2,111	1,667	912	2,105	807	9	26	0
182 Inst Paper Sci and Tech	7,366	4,155	2,539	0	0	672	0	0	0
183 U TX Dallas	7,268	944	1,010	1,668	415	1,658	331	1,242	0
184 University of North Texas	7,252	325	2,017	1,272	391	646	503	454	1,644
185 Woods Hole Oceanograph	7,126	1,290	0	5,836	0	0	0	0	0
186 Old Dominion University	7,023	1,365	456	4,077	76	870	5	174	0
187 U of Missouri Kansas City	6,662	0	267	10	960	4,269	440	310	406
188 University of Notre Dame	6,475	2,706	2,012	0	443	1,120	72	49	73
189 Western Michigan U	6,446	1,464	96	1,223	669	104	4	2,799	87
190 CUNY Col Staten Island	6,393	708	2,239	95	263	3,076	7	5	0
Total, 1st 190 insts	8,006,707	1,269,906	557,986	436,565	249,522	4,610,132	107,271	545,326	229,999
191 George Mason University	6,192	1,858	527	0	746	953	274	1,834	0
192 Desert Research Institute	6,187	0	0	4,523	0	1,561	0	103	0
193 Cleveland State U	5,950	1,309	134	3	7	79	15	4,403	0
194 Stevens Inst of Tech	5,816	4,969	227	0	108	0	0	512	0
195 U PR Med Sci Campus	5,792	0	0	0	0	5,792	0	0	0
196 Brigham Young University	5,733	1,808	1,329	11	231	1,399	60	876	19
197 Wichita State University	5,731	4,362	491	117	274	453	0	34	0
198 Colorado School of Mines	5,719	4,737	181	222	579	0	0	0	0
199 Kent State University	5,307	0	4,024	169	184	294	530	93	13
200 CUNY City College	5,246	3,583	650	104	48	779	77	5	0
Total, 1st 200 insts	8,064,380	1,292,532	565,549	441,714	251,699	4,621,442	108,227	553,186	230,031
Total, all other sampled insts	266,139	51,395	32,864	17,304	13,250	103,543	6,839	31,507	9,437
Estimated total non-sampled insts	89,568	7,087	7,592	17,949	4,529	37,309	934	7,101	7,066

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-42. R&D expenditures at public universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Total, all institutions	14,155,210	2,262,173	1,411,031	1,125,755	492,155	7,638,307	249,412	702,995	273,382
1 University of Michigan	430,778	88,837	22,972	20,823	19,186	212,198	9,098	51,094	6,570
2 U WI Madison	392,718	55,021	39,838	21,898	10,031	222,482	11,540	31,028	880
3 Texas A&M University	355,750	82,565	21,890	80,878	6,963	141,130	1,570	17,547	3,207
4 University of Washington	343,910	20,332	19,375	57,912	6,516	218,998	7,321	10,675	2,781
5 U CA San Diego	331,901	15,806	35,450	102,266	13,542	156,724	3,998	4,115	0
6 University of Minnesota	317,865	30,625	15,802	11,560	21,815	219,241	6,970	11,852	0
7 U CA San Francisco	312,393	0	0	0	0	312,393	0	0	0
8 Pennsylvania State U	302,997	129,313	22,486	21,360	3,518	96,520	6,393	10,409	12,998
9 U CA Berkeley	289,632	61,654	59,996	4,466	4,836	122,182	6,617	24,830	5,051
10 U CA Los Angeles	279,869	29,544	24,069	14,130	8,291	178,014	7,514	18,307	0
Total, 1st 10 insts.	3,357,813	513,697	261,878	335,293	94,698	1,879,882	61,021	179,857	31,487
11 University of Arizona	269,939	20,659	91,765	20,861	7,296	116,202	2,546	8,666	1,944
12 U TX Austin	260,602	106,743	64,108	25,826	15,897	23,584	3,961	16,183	4,300
13 University of IL Urbana	245,407	51,634	38,500	27,052	15,395	55,519	6,305	14,096	36,906
14 Ohio State University	230,515	51,162	19,834	7,644	11,072	117,294	1,517	16,218	5,774
15 U CA Davis	230,147	14,709	8,361	1,331	1,730	199,638	1,415	2,963	0
16 University of Colorado	228,067	26,666	35,005	36,036	11,598	107,413	7,423	3,833	93
17 U of NC Chapel Hill	201,622	0	9,415	11,413	9,404	150,449	2,727	18,214	0
18 U MD College Park	198,348	47,556	56,381	8,932	19,849	30,341	3,799	31,490	0
19 Georgia Institute of Tech	193,630	125,004	20,390	9,459	23,775	4,996	1,473	7,060	1,473
20 University of Pittsburgh	192,465	8,171	12,179	270	2,533	157,299	2,378	8,421	1,214
Total, 1st 20 insts.	5,608,555	966,001	617,816	484,117	213,247	2,842,617	94,565	307,001	83,191
21 University of Georgia	187,849	5,067	8,658	8,426	6,613	130,849	6,004	22,232	0
22 NC State U Raleigh	173,407	58,871	9,379	9,651	5,651	86,319	256	3,280	0
23 Rutgers the State U NJ	173,211	25,389	17,121	9,898	13,762	78,384	6,830	18,051	3,776
24 Purdue University	172,733	47,809	18,772	2,081	6,863	84,027	2,368	10,616	197
25 University of Florida	167,999	30,220	12,732	4,961	5,152	105,975	2,876	4,983	1,100
26 Louisiana St U, All Camp	165,857	22,781	10,811	20,537	1,730	102,957	474	5,440	1,127
27 Michigan State University	163,285	18,223	23,638	431	6,419	101,327	2,303	9,353	1,591
28 U of Iowa	157,036	17,841	14,569	1,588	1,368	114,664	1,014	5,233	759
29 Iowa State University	155,982	44,152	6,764	918	9,261	79,520	763	10,438	4,166
30 U of Tennessee System	153,340	29,887	13,530	13,069	16,556	73,866	163	5,083	1,186
Total, 1st 30 insts.	7,279,254	1,266,241	753,790	555,677	286,622	3,800,505	117,616	401,710	97,093
31 VA Polytech Inst & St U	148,313	43,623	9,187	32,781	3,796	51,945	2,031	4,950	0
32 U of Alabama Birmingham	141,735	6,062	1,097	15	216	133,287	832	226	0
33 SUNY Buffalo	141,092	23,271	8,108	846	7,383	91,711	5,607	4,009	157
34 University of Connecticut	136,740	29,561	3,819	7,614	2,945	75,294	7,440	8,379	1,688
35 Indiana University	136,617	890	29,262	2,350	4,149	81,488	5,248	5,275	7,955
36 University of Virginia	131,350	21,542	14,644	6,653	4,859	76,442	3,084	4,058	68
37 U TX MD Anderson Cncr	122,357	0	3,112	0	2,096	117,149	0	0	0
38 U of Missouri Columbia	121,256	12,381	8,721	1,648	848	86,852	2,341	8,424	41
39 Oregon State University	119,772	12,107	4,154	25,740	2,080	72,240	110	2,769	572
40 U TX SW Med Ctr Dallas	118,398	0	0	0	0	118,398	0	0	0
Total, 1st 40 insts.	8,596,884	1,415,678	835,894	633,324	314,994	4,705,311	144,309	439,800	107,574
41 University of IL Chicago	113,741	8,364	7,464	946	2,481	83,844	1,671	3,565	5,406
42 SUNY Stony Brook	113,251	4,241	23,179	15,931	6,299	56,949	3,026	3,481	145
43 Colorado State University	112,457	16,437	7,740	11,432	1,711	62,196	2,111	4,011	6,819
44 U MD Baltimore Prof Sch	110,866	0	0	0	0	110,866	0	0	0
45 University of Kentucky	105,539	16,900	2,422	218	1,046	78,171	776	1,782	4,224
46 U CA Irvine	104,778	9,754	14,388	1,146	4,262	70,102	729	4,397	0
47 University of Utah	103,771	15,636	9,215	4,870	8,549	63,996	1,033	472	0
48 U of Nebraska Lincoln	102,746	14,565	6,535	5,151	1,297	71,200	981	2,830	187
49 University of Oklahoma	95,747	14,059	8,566	12,655	3,407	43,580	3,307	10,173	0
50 University of Kansas	95,701	7,278	8,411	7,742	729	57,486	1,386	2,305	10,364
Total, 1st 50 insts.	9,655,481	1,522,912	923,814	693,415	344,775	5,403,701	159,329	472,816	134,719

See explanatory information and SOURCE at end of table.

Table B-42. R&D expenditures at public universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
51 Wayne State University	94,632	7,704	9,526	0	669	69,159	2,221	3,661	1,692
52 Washington State U	94,166	9,185	5,832	685	473	55,918	282	11,987	9,804
53 University of Cincinnati	93,599	19,430	4,736	351	586	65,469	420	540	2,067
54 University of New Mexico	90,315	36,271	4,439	2,267	2,528	30,464	2,001	5,174	7,171
55 U Med & Dent NJ	86,866	0	0	0	0	86,866	0	0	0
56 U of South Florida	86,186	11,697	1,937	8,835	342	56,049	5,390	1,936	0
57 Utah State University	83,758	25,448	5,877	14,912	442	26,319	1,664	2,016	7,080
58 U TX Hlth Sci Ctr San Ant	83,535	0	0	0	0	83,535	0	0	0
59 New Mexico State U	80,286	43,255	2,730	9,585	2,893	19,327	62	811	1,623
60 Virginia Commonwealth U	76,597	299	2,813	0	237	70,569	1,361	1,318	0
Total, 1st 60 insts.	10,525,421	1,676,201	961,704	730,050	352,945	5,967,376	172,730	500,259	164,156
61 Florida State University	76,588	1,555	46,225	11,752	1,959	8,090	2,925	4,082	0
62 Clemson University	76,572	24,055	5,376	741	3,667	35,024	236	5,861	1,612
63 Mississippi State U	76,201	17,936	3,500	3,587	385	41,822	0	3,451	5,520
64 U of Alaska Fairbanks	76,093	3,484 i	15,465 i	35,838 i	90 i	18,053 i	0 i	3,163 i	0 i
65 Auburn University	75,738	21,299	3,794	481	982	44,814	327	1,199	2,842
66 U of South Carolina	74,001	13,459	7,646	13,591	6,270	18,901	1,309	7,446	5,379
67 U CA Santa Barbara	73,619	28,477	17,084	9,789	5,710	3,133	2,852	6,462	112
68 U TX Med Br Galveston	72,773	0	0	0	0	72,773	0	0	0
69 Oklahoma State University	70,808	19,753	7,008	1,890	903	35,751	162	4,123	1,218
70 University Hawaii Manoa	70,079	2,403	20,223	8,141	1,151	29,589	534	3,258	4,780
Total, 1st 70 insts.	11,267,893	1,808,622	1,088,025	815,860	374,062	6,275,326	181,075	539,304	185,619
71 U TX Hlth Sci Ctr Houston	66,432	0	0	0	0	65,238	0	1,194	0
72 Kansas State University	65,696	9,355	5,235	237	851	46,060	572	2,197	1,189
73 U MA Amherst	65,344	9,962	15,835	6,386	12,704	17,229	2,547	542	139
74 Oregon Health Sciences U	63,875	0	0	0	0	60,871	3,004	0	0
75 Arizona State University	62,563	19,555	16,816	3,446	2,064	7,840	2,928	7,551	2,363
76 U MA Worcester	61,790	0	0	0	0	61,790	0	0	0
77 U CA Riverside	60,995	482	6,196	3,162	970	48,368	1,044	773	0
78 SUNY Albany	59,122	0	3,301	6,776	706	37,996	4,039	6,304	0
79 West Virginia University	58,604	13,108	1,734	7,320	5,361	27,054	67	2,324	1,636
80 U Arkansas Main	57,815	10,220	3,861	1,915	837	36,942	472	3,041	527
Total, 1st 80 insts.	11,890,129	1,871,304	1,141,003	845,102	397,555	6,684,714	195,748	563,230	191,473
81 Temple University	56,308	400	1,096	17	545	39,870	4,416	9,546	418
82 University of Vermont	51,775	1,953	938	65	129	46,542	787	24	1,337
83 University of Delaware	50,734	14,668	8,993	7,154	3,795	12,061	582	3,481	0
84 University of Idaho	49,338	7,303	3,364	2,675	157	34,860	66	913	0
85 U of Rhode Island	46,631	5,415 i	1,149 i	22,534 i	278 i	10,158 i	3,450 i	2,773 i	874 i
86 Med U of South Carolina	46,249	0	0	0	0	46,249	0	0	0
87 U of New Hampshire	43,707	3,551	1,469	23,016	773	8,980	458	2,315	3,145
88 University of Houston	43,131	21,961	8,755	1,379	1,309	5,630	2,973	1,062	62
89 U CA Santa Cruz	42,457	0	19,761	9,443	1,373	7,314	715	3,851	0
90 U of Nevada Reno	42,176	7,100	1,586	4,089	101	17,248	305	1,360	10,387
Total, 1st 90 insts.	12,362,635	1,933,655	1,188,114	915,474	406,015	6,913,626	209,500	588,555	207,696
91 U of Central Florida	41,362	10,747	7,776	8,909	979	947	520	376	11,108
92 Texas Tech University	39,455	9,513	4,070	1,017	1,194	20,018	74	3,141	428
93 North Dakota State U	36,977	3,190	4,684	205	938	25,000	582	2,176	202
94 Montana State University	36,149	4,759	3,857	388	475	24,839	0	1,538	293
95 U of NE Med Ctr Omaha	33,997	0	0	0	0	33,997	0	0	0
96 University of Wyoming	33,820	2,160	2,604	7,624	491	16,967	267	276	3,431
97 U of Alabama Huntsville	31,482	12,636	7,805	4,875	4,592	191	0	9	1,374
98 University of Oregon	31,170	2,081	12,123	1,603	2,184	9,214	2,017	1,948	0
99 Sthrn IL U Carbondale	30,497	4,529	1,719	786	2,664	14,572	375	1,553	4,299
100 NJ Inst of Technology	29,983	8,952	1,811	7,683	2,274	0	0	302	8,961
Total, 1st 100 insts.	12,707,527	1,992,222	1,234,563	948,564	421,806	7,059,371	213,335	599,874	237,792

See explanatory information and SOURCE at end of table

Table B-42. R&D expenditures at public universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
101 U of Maine	29,393	3,337	877	6,920	46	15,864	328	2,021	0
102 San Diego St University	29,309	2,356	1,436	533	775	15,421	3,282	1,398	4,108
103 Medical Col of Georgia	28,020	0	0	0	0	28,020	0	0	0
104 SUNY Hlth Sci Ctr Brklyn	27,773	0	0	0	0	27,773	0	0	0
105 Unif Svcs U of Hlth Sci	27,334	0	0	0	0	27,334	0	0	0
106 US Naval Postgrad School	26,538	6,944	1,986	4,157	8,417	58	0	3,568	1,408
107 U Mississippi, All Camp	25,000	3,290	4,325	0	77	16,330	235	743	0
108 Florida A&M University	24,691	3,600	3,072	0	173	17,464	311	71	0
109 U PR Mayaguez	22,967	3,002	1,235	3,062	373	14,908	0	387	0
110 U Arkansas Medical Sci	22,762	0	0	0	0	22,762	0	0	0
Total, 1st 110 insts.	12,971,314	2,014,751	1,247,494	963,236	431,667	7,245,305	217,491	608,062	243,308
111 The University of Alabama	21,960	8,932	5,319	1,012	297	2,861	112	3,244	183
112 SUNY Col Env Sci Frstry	21,839	7,042	1,314	2,239	0	11,104	0	140	0
113 Michigan Tech University	21,786	14,714	1,938	1,279	240	2,953	0	458	204
114 Desert Research Institute	21,459	0	0	14,122	0	4,128	0	3,209	0
115 Wright State University	21,055	3,246	1,864	313	3,009	11,296	758	85	484
116 NM Inst Mining & Tech	20,945	14,617	1,690	3,845	536	226	18	13	0
117 University of Louisville	20,475	1,547	1,918	566	375	14,815	46	1,208	0
118 Col of William & Mary	20,443	0	4,093	13,723	474	585	155	1,413	0
119 U MD Center for EES	19,817	0	0	19,817	0	0	0	0	0
120 U of Missouri Rolla	19,706	14,015	3,183	863	465	843	0	12	325
Total, 1st 120 insts.	13,180,799	2,078,864	1,268,813	1,021,015	437,063	7,294,116	218,580	617,844	244,504
121 U WI Milwaukee	19,180	3,563	3,405	2,987	490	2,232	447	5,235	821
122 U of Nevada Las Vegas	19,031	2,549	1,594	10,123	1,970	1,960	7	828	0
123 George Mason University	18,871	7,003	2,888	0	3,551	1,452	550	3,427	0
124 CUNY City College	18,831	6,761	6,461	486	633	4,121	350	19	0
125 University North Dakota	18,732	10,433	180	1,465	0	4,051	3	1,356	1,244
126 U PR Med Sci Campus	17,765	0	0	0	0	17,765	0	0	0
127 U TX Arlington	17,453	9,764	2,641	535	2,782	649	46	252	784
128 Georgia State University	17,100	0	4,716	290	1,245	4,713	2,998	2,406	732
129 University of Montana	16,908	0	908	391	2,841	10,687	28	756	1,297
130 University of Akron	16,783	5,969	8,325	172	741	1,154	121	301	0
Total, 1st 130 insts.	13,361,453	2,124,906	1,299,931	1,037,464	451,316	7,342,900	223,130	632,424	249,382
131 Ohio University	16,425	8,606	1,883	95	66	4,666	212	211	686
132 SUNY Binghamton	15,803	2,713	2,084	982	1,650	2,403	3,318	2,653	0
133 U MA Lowell	15,155	5,926	5,419	75	526	2,471	149	411	178
134 Old Dominion University	14,911	5,415	1,674	5,061	887	1,381	47	446	0
135 U MD Biotechnology Inst	14,839	0	0	4,355	0	10,484	0	0	0
136 U TX Dallas	14,492	1,082	5,622	2,185	562	3,189	561	1,291	0
137 South Dakota State U	14,083	812	178	1,112	0	11,344	0	637	0
138 U of South Alabama	13,917	380	260	344	158	11,629	297	577	272
139 Colorado School of Mines	13,880	11,035	1,459	583	803	0	0	0	0
140 Western Illinois U	13,780	2,320	2,077	1,892	959	4,174	782	818	758
Total, 1st 140 insts.	13,508,738	2,163,195	1,320,587	1,054,148	456,927	7,394,641	228,496	639,468	251,276
141 NC A&T State University	13,637	7,901	653	0	568	3,267	98	556	594
142 Florida International U	13,520	4,982	424	502	1,724	5,182	405	301	0
143 Memphis State University	13,305	1,722	289	2,738	423	1,753	3,441	1,818	1,121
144 Med Col of Ohio Toledo	12,471	0	0	111	61	12,299	0	0	0
145 CUNY Hunter College	12,264	0	2,937	1,064	380	4,892	1,047	1,931	13
146 U TX El Paso	12,062	4,177	1,015	1,604	661	2,717	102	1,757	29
147 SUNY Hlth Sci Ctr Syrcse	11,751	0	0	0	0	11,751	0	0	0
148 Northern Illinois U	11,445	734	2,314	540	338	2,904	405	4,210	0
149 U of Missouri Kansas City	11,420	0	747	10	960	8,378	440	479	406
150 Kent State University	11,312	233	8,025	307	658	731	1,204	141	13
Total, 1st 150 insts.	13,631,925	2,182,944	1,336,991	1,061,024	462,700	7,448,515	235,638	650,661	253,452
Total, all other sampled insts.	374,972	65,362	59,679	31,501	21,618	128,259	10,323	44,362	13,868
Estimated total non-sampled insts.	148,313	13,867	14,361	33,230	7,837	61,533	3,451	7,972	6,062

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-43. Federally financed R&D expenditures at public universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Total, all institutions	7,639,018	1,157,030	920,882	693,785	296,007	4,042,968	163,306	253,159	111,882
1 University of Washington	281,033	11,149	15,489	55,009	5,901	177,093	6,931	6,747	2,714
2 U CA San Diego	266,166	11,561	29,855	81,240	8,671	130,681	3,231	927	0
3 University of Michigan	264,722	54,368	13,738	15,770	14,903	137,988	5,039	20,910	2,006
4 U WI Madison	225,403	34,375	29,656	15,148	7,531	113,254	8,870	16,504	65
5 U CA San Francisco	213,252	0	0	0	0	213,252	0	0	0
6 U CA Los Angeles	190,202	22,473	20,917	9,337	7,308	120,497	5,731	3,939	0
7 University of Minnesota	181,039	18,885	13,695	4,745	16,759	118,286	5,922	2,747	0
8 Pennsylvania State U	168,679	85,836	13,994	11,742	2,241	45,118	3,458	3,653	2,637
9 University of Colorado	158,163	14,781	22,999	26,785	6,970	79,343	5,004	2,281	0
10 U CA Berkeley	152,528	33,108	45,382	2,861	3,943	57,209	4,455	4,218	1,352
Total, 1st 10 insts.	2,101,187	286,536	205,725	222,637	74,227	1,192,721	48,641	61,926	8,774
11 University of Pittsburgh	152,138	5,324	10,263	241	2,059	126,263	2,219	4,612	1,157
12 U TX Austin	149,586	61,596	44,574	9,932	9,371	15,924	3,265	4,195	729
13 U of NC Chapel Hill	149,047	0	7,263	6,654	6,894	112,974	2,356	12,906	0
14 University of Arizona	145,696	10,734	57,541	7,815	5,117	59,396	1,072	2,780	1,241
15 University of IL Urbana	138,734	30,946	31,668	8,227	7,427	27,279	4,528	3,743	24,916
16 Texas A&M University	136,942	22,788	10,613	62,565	3,081	33,685	710	3,397	103
17 Ohio State University	113,186	17,182	14,305	4,860	3,743	58,037	1,076	11,201	2,782
18 U CA Davis	112,718	6,069	7,291	1,106	1,578	93,866	1,298	1,510	0
19 U of Iowa	99,536	10,074	11,327	369	912	74,873	627	1,354	0
20 U of Alabama Birmingham	98,719	1,086	776	15	192	95,778	700	172	0
Total, 1st 20 insts.	3,397,489	452,335	401,346	324,421	114,601	1,890,796	66,492	107,796	39,702
21 Georgia Institute of Tech	97,075	62,671	10,222	4,742	11,919	2,505	738	3,539	739
22 U MD College Park	86,051	22,912	30,017	5,511	8,473	9,435	1,097	8,606	0
23 University of Virginia	85,499	14,337	11,541	5,493	4,077	47,377	2,512	150	12
24 U of Tennessee System	82,288	14,379	8,385	8,682	12,874	35,803	72	2,093	0
25 Purdue University	82,148	26,369	12,298	1,460	4,250	33,903	1,528	2,224	116
26 SUNY Buffalo	81,814	6,530	5,114	380	4,693	62,175	1,659	1,163	100
27 Indiana University	81,657	151	20,065	1,106	2,940	50,302	4,182	1,191	1,720
28 University of Utah	81,263	10,632	8,168	3,514	7,473	50,386	771	319	0
29 University of Florida	79,630	14,070	5,775	1,648	2,981	51,781	1,445	1,516	414
30 Michigan State University	73,855	8,501	13,818	266	1,676	42,179	1,603	5,177	635
Total, 1st 30 insts.	4,228,769	632,887	526,749	357,223	175,957	2,276,642	82,099	133,774	43,438
31 VA Polytech Inst & St U	73,490	21,304	4,448	28,812	2,413	14,008	1,248	1,257	0
32 SUNY Stony Brook	72,673	2,452	15,569	9,836	4,079	37,088	2,413	1,236	0
33 U TX SW Med Ctr Dallas	71,468	0	0	0	0	71,468	0	0	0
34 NC State U Raleigh	69,608	26,734	6,494	4,638	2,630	27,879	192	1,041	0
35 Rutgers the State U NJ	68,149	13,601	9,161	4,110	7,566	23,741	2,833	7,094	43
36 U CA Irvine	67,245	4,478	12,975	772	3,397	42,142	683	2,798	0
37 Colorado State University	66,464	7,157	5,558	8,959	932	35,455	1,934	1,301	5,168
38 Oregon State University	65,069	4,983	2,932	21,983	1,195	32,480	108	957	431
39 U MD Baltimore Prof Sch	59,727	0	0	0	0	59,727	0	0	0
40 New Mexico State U	59,632	36,840	2,357	8,262	2,181	7,971	26	552	1,443
Total, 1st 40 insts.	4,902,294	750,436	586,243	444,595	200,350	2,628,601	91,536	150,010	50,523
41 U CA Santa Barbara	59,336	24,538	15,095	6,959	4,177	2,308	2,142	4,117	0
42 University of IL Chicago	57,074	3,452	4,960	161	1,833	43,159	1,104	1,030	1,375
43 Iowa State University	56,439	20,444	3,706	524	1,842	24,726	178	4,778	241
44 University of Cincinnati	56,361	11,264	3,050	238	437	39,706	188	303	1,175
45 University of Georgia	55,005	1,116	2,989	2,063	1,323	43,577	2,589	1,348	0
46 Louisiana St U, All Camp	52,064	4,957	6,011	7,308	362	32,301	307	789	29
47 University of New Mexico	51,780	21,572	2,397	1,560	1,082	18,573	1,480	1,244	3,872
48 U TX Hlth Sci Ctr San Ant	51,671	0	0	0	0	51,671	0	0	0
49 University of Kentucky	48,801	6,047	2,064	194	817	36,168	776	1,238	1,497
50 University of Connecticut	48,286	4,381	919	3,771	838	33,986	2,979	1,412	0
Total, 1st 50 insts.	5,439,111	848,207	627,434	467,373	213,061	2,954,776	103,279	166,269	58,712

See explanatory information and SOURCE at end of table.

Table B-43. Federally financed R&D expenditures at public universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
51 Virginia Commonwealth U	47,923	10	1,705	0	70	45,295	700	143	0
52 U TX Hlth Sci Ctr Houston	46,821	0	0	0	0	45,962	0	859	0
53 Utah State University	46,128	21,917	4,261	5,541	211	10,999	1,327	771	1,101
54 Washington State U	45,513	5,575	3,793	292	274	21,718	151	4,211	9,499
55 Oregon Health Sciences U	43,629	0	0	0	0	40,980	2,649	0	0
56 Wayne State University	43,354	2,338	3,769	0	352	35,208	1,470	217	0
57 U TX MD Anderson Cncr	42,416	0	2,410	0	434	39,572	0	0	0
58 University of Kansas	40,816	3,731	3,282	888	628	25,134	851	176	6,126
59 U of Alaska Fairbanks	40,770	818 i	10,099 i	22,985 i	23 i	6,265 i	0 i	580 i	0 i
60 U Med & Dent NJ	40,687	0	0	0	0	40,687	0	0	0
Total, 1st 60 insts	5,877,168	882,596	656,753	497,079	215,053	3,266,596	110,427	173,226	75,438
61 Florida State University	39,775	672	26,863	5,946	983	3,328	1,408	575	0
62 University Hawaii Manoa	39,392	1,559	14,828	5,169	998	13,801	322	586	2,129
63 U of South Carolina	37,918	6,665	5,351	3,456	4,832	9,776	959	3,575	3,304
64 University of Oklahoma	35,266	4,340	3,634	4,702	1,364	15,142	1,934	4,150	0
65 U MA Worcester	34,923	0	0	0	0	34,923	0	0	0
66 West Virginia University	34,622	8,537	1,410	5,896	3,132	13,928	8	412	1,299
67 Mississippi State U	33,918	12,470	2,931	3,050	382	12,346	0	1,020	1,719
68 University of Vermont	33,695	1,023	670	49	72	30,901	430	0	550
69 U of Rhode Island	33,025	3,292 i	822 i	19,574 i	202 i	3,526 i	3,073 i	2,077 i	459 i
70 U TX Med Br Galveston	32,775	0	0	0	0	32,775	0	0	0
Total, 1st 70 insts	6,232,477	921,154	713,262	544,921	227,018	3,437,042	118,561	185,621	84,898
71 U MA Amherst	32,730	4,811	9,064	2,102	7,948	6,655	2,054	96	0
72 SUNY Albany	32,511	0	1,171	3,467	462	22,203	2,983	2,225	0
73 U of Missouri Columbia	31,299	3,063	1,419	164	412	22,627	944	2,650	20
74 Arizona State University	30,699	6,637	10,651	3,158	1,327	4,616	2,027	2,214	69
75 U of Nebraska Lincoln	29,781	2,054	4,303	1,702	444	20,352	408	416	102
76 Med U of South Carolina	28,507	0	0	0	0	28,507	0	0	0
77 Temple University	27,140	123	600	0	386	18,588	3,475	3,805	163
78 University of Delaware	26,250	6,926	6,288	4,927	2,926	2,556	363	2,264	0
79 US Naval Postgrad School	26,225	6,833	1,930	4,061	8,417	58	0	3,565	1,361
80 U of New Hampshire	25,032	1,706	1,115	15,716	522	4,306	413	1,253	1
Total, 1st 80 insts	6,522,651	953,307	749,803	580,218	249,862	3,567,510	131,228	204,109	86,614
81 Clemson University	24,133	7,581	1,694	235	1,156	11,038	74	1,847	508
82 U CA Santa Cruz	23,802	0	9,558	6,005	1,043	4,438	450	2,308	0
83 U CA Riverside	23,743	393	5,631	2,178	561	13,859	967	154	0
84 University of Houston	22,830	9,832	4,865	472	773	4,123	2,209	502	54
85 University of Oregon	22,204	1,514	8,536	1,047	1,675	7,218	1,322	892	0
86 U of Alabama Huntsville	21,583	8,225	5,398	3,958	2,794	119	0	1	1,088
87 Kansas State University	21,547	3,067	4,362	143	331	12,802	128	356	358
88 Florida A&M University	20,730	3,148	2,936	0	157	14,160	311	18	0
89 Oklahoma State University	20,440	8,773	2,761	208	301	7,572	11	654	160
90 U of South Florida	19,910	4,057	662	5,476	71	7,286	1,838	520	0
Total, 1st 90 insts	6,743,573	999,897	796,206	599,940	258,724	3,650,125	138,538	211,361	88,782
91 U of Nevada Reno	18,799	4,640	678	3,659	36	8,451	114	432	789
92 Auburn University	18,347	7,151	1,253	88	643	8,660	306	192	54
93 Unif Svcs U of Hlth Sci	18,124	0	0	0	0	18,124	0	0	0
94 SUNY Hlth Sci Ctr Brklyn	16,695	0	0	0	0	16,695	0	0	0
95 University North Dakota	16,660	9,569	148	1,097	0	3,619	3	1,133	1,091
96 University of Idaho	16,586	1,701	1,750	810	55	11,942	0	328	0
97 U Arkansas Main	16,040	3,675	2,014	819	36	8,606	1	524	365
98 U Mississippi, All Camp	15,836	2,178	3,400	0	72	9,444	195	547	0
99 Montana State University	15,738	2,533	2,893	221	341	9,035	0	561	154
100 Desert Research Institute	15,272	0	0	9,599	0	2,567	0	3,106	0
Total, 1st 100 insts	6,911,670	1,031,344	808,342	616,233	259,907	3,747,268	139,157	218,184	91,235
Total, all other sampled insts	648,704	116,088	101,908	61,410	31,475	265,811	21,112	31,421	19,479
Estimated total non-sampled insts	78,644	9,598	10,632	16,142	4,625	29,889	3,037	3,554	1,168

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-44. R&D expenditures at private universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Total, all institutions	6,925,999	1,061,593	760,172	300,218	445,915	3,882,274	109,135	248,118	118,575
1 Johns Hopkins U	784,043	210,522	117,188	40,593	119,297	270,314	1,021	9,784	15,324
2 MA Institute of Tech	363,918	153,530	95,154	16,094	18,514	37,690	8,503	8,179	26,254
3 Stanford University	318,561	92,946	44,030	6,192	14,513	152,104	3,710	5,066	0
4 Cornell University	312,683	41,416	45,211	4,389	23,614	184,425	3,670	9,958	0
5 Harvard University	278,459e	6,027e	31,718e	9,714e	4,169e	168,143e	3,117e	46,480e	9,091e
6 U of Pennsylvania	251,461	11,918	23,245	801	8,408	183,502	2,296	21,291	0
7 Columbia University	236,417	14,407	21,433	39,786	4,637	148,100	2,386	5,668	0
8 Yale University	230,375	7,001	19,128	2,299	5,342	186,775	7,207	2,623	0
9 Duke University	220,220	7,640	12,323	3,300	2,826	174,326	6,105	13,576	124
10 U of Southern California	207,275	26,861	7,014	11,591	35,013	117,145	2,446	5,530	1,675
Total, 1st 10 insts	3,203,412	572,268	416,444	134,759	236,333	1,622,524	40,461	128,155	52,468
11 Washington University	192,378	4,264	8,070	3,505	6,291	168,452	822	974	0
12 Baylor Col of Medicine	186,865	0	0	0	0	186,865	0	0	0
13 Northwestern University	179,478	21,630	12,465	789	13,937	87,992	1,713	1,824	39,128
14 University of Rochester	167,485	55,780	13,126	382	2,794	88,367	6,001	535	500
15 New York University	139,202	0	3,466	676	12,948	110,518	4,686	5,836	1,072
16 Emory University	136,343	0	5,495	2	451	121,583	1,399	7,413	0
17 Case Western Reserve U	133,272	24,859	5,422	315	301	98,002	515	3,858	0
18 California Inst of Tech	127,946	23,093	54,539	14,850	6,625	25,670	0	758	2,411
19 Carnegie Mellon U	122,580	28,153	7,551	1,711	61,726	11,597	5,625	5,053	1,164
20 University of Chicago	121,902	0	31,971	3,791	3,413	78,823	1,306	2,598	0
Total, 1st 20 insts	4,710,863	730,047	558,549	160,780	344,819	2,600,393	62,528	157,004	96,743
21 University of Miami	121,475	1,683	1,330	25,528	558	84,018	1,679	6,652	27
22 Vanderbilt University	110,105	10,579	8,056	77	773	83,959	2,980	3,681	0
23 Princeton University	99,287	24,454	25,463	8,190	8,561	16,239	6,281	10,099	0
24 Yeshiva University	92,881	0	0	0	0	92,881	0	0	0
25 Boston University	90,504	7,732	9,701	1,168	2,761	64,285	188	1,302	3,367
26 CUNY Mt Sinai Sch Med	86,179	0	0	0	0	86,179	0	0	0
27 Tulane University	83,885	8,829	2,944	240	744	61,322	800	8,401	605
28 Georgetown University	82,661	0	4,907	715	715	72,439	81	3,557	247
29 Woods Hole Oceanograph	81,345	17,371	0	63,974	0	0	0	0	0
30 Rockefeller University	74,458	0	6,028	0	1,291	67,139	0	0	0
Total, 1st 30 insts	5,633,643	800,695	616,978	260,672	360,222	3,228,854	74,537	190,696	100,989
31 Tufts University	73,749	4,521	3,190	1	191	61,668	1,650	2,528	0
32 Dartmouth College	57,845	6,545	3,028	1,539	943	43,869	992	666	263
33 Thomas Jefferson U	56,932	0	0	0	0	56,932	0	0	0
34 Brown University	55,146	8,550	7,492	5,202	8,470	21,537	1,607	2,288	0
35 Wake Forest University	52,581	0	1,177	0	64	51,090	0	0	250
36 Medical Col of Wisconsin	49,604	0	0	0	0	49,604	0	0	0
37 University of Dayton	47,768	41,734	2,120	159	463	479	1,949	425	439
38 Rush University	39,736	0	0	0	0	36,304	3,432	0	0
39 Syracuse University	38,650	13,214	5,896	1,294	8,225	4,904	975	3,213	929
40 George Washington U	38,429	6,351	901	141	6,032	16,556	750	7,226	472
Total, 1st 40 insts	6,144,083	881,610	640,782	269,008	384,610	3,571,797	85,892	207,042	103,342
41 Rensselaer Polytech Inst	37,191	26,012	6,416	1,092	2,583	563	59	251	215
42 Loyola U of Chicago	36,830	0	533	0	1,950	32,109	175	1,763	300
43 Brandeis University	34,835	0	3,736	0	1,132	15,807	1,578	12,582	0
44 Rice University	33,309	4,627	8,943	3,671	11,708	3,967	313	80	0
45 The Medical Col of PA	30,473	0	0	0	0	30,473	0	0	0
46 Lehigh University	29,188	21,795	4,664	1,146	357	660	310	256	0
47 University of Notre Dame	22,833	6,120	12,569	0	895	2,704	355	107	83
48 Drexel University	20,886	12,143	1,800	1,566	2,125	991	0	2,261	0
49 Oregon Grad Inst Sci Tech	20,859	3,864	6,171	3,631	7,193	0	0	0	0
50 St Louis University	20,844	4	0	736	64	19,937	0	4	99
Total, 1st 50 insts.	6,431,331	956,175	685,614	280,850	412,617	3,679,008	88,682	224,346	104,039

See explanatory information and SOURCE at end of table.

Table B-44. R&D expenditures at private universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
51 Howard University	19,836	3,258	3,109	0	325	10,398	1,162	1,212	372
52 Northeastern University	19,104	7,572	3,630	0	1,435	4,349	941	1,177	0
53 New York Medical College	18,725	0	0	0	0	18,725	0	0	0
54 Med Col Hampton Roads	17,873	0	0	0	0	17,873	0	0	0
55 Med Col PA Hahnemann U	14,745	0	0	0	0	14,745	0	0	0
56 Mercer University	14,201	12,411	211	0	0	1,579	0	0	0
57 Brigham Young University	13,859	6,338	2,387	116	471	2,761	140	1,498	148
58 Stevens Inst of Tech	13,460	11,592	946	0	108	0	0	814	0
59 Clark Atlanta University	12,709	1,447	3,880	135	2,024	4,957	0	266	0
60 Polytechnic University	11,869	7,795	1,551	0	2,523	0	0	0	0
Total, 1st 60 insts.	6,587,712	1,006,588	701,328	281,101	419,503	3,754,395	90,925	229,313	104,559
61 Worcester Polytech Inst	11,602	5,247	408	0	5,533	327	0	87	0
62 Rochester Inst of Tech	11,528	603i	7i	0i	31i	1,715i	0i	61i	9,111i
63 Boston College	10,724	0	3,002	612	5,343	1,171	174	422	0
64 Clarkson University	10,412	7,323	2,084	0	794	142	69	0	0
65 Meharry Medical College	10,336	0	0	1,561	0	8,775	0	0	0
66 Albany Medical College	10,324	0	0	0	0	10,324	0	0	0
67 Creighton University	9,645	0	232	1	0	9,412	0	0	0
68 C R Drew U of Med & Sci	9,347	0	0	0	0	9,347	0	0	0
69 Loma Linda University	9,204	0	0	223	0	8,952	0	29	0
70 Inst Paper Sci and Tech	8,995	4,456	3,867	0	0	672	0	0	0
Total, 1st 70 insts.	6,689,829	1,024,217	710,928	283,498	431,204	3,805,232	91,168	229,912	113,670
71 Illinois Inst of Tech	8,853	3,938	1,238	421	229	2,947	15	0	65
72 Southern Methodist U	8,277	1,157	1,442	2,312	1,201	1,157	67	389	552
73 University of Tulsa	7,945	4,717	578	616	293	1,376	232	133	0
74 Catholic U of America	7,542	1,138	4,623	0	0	483	576	722	0
75 Morehouse School of Med	7,522	0	0	0	0	7,094	0	0	428
76 Tuskegee University	7,121	943	559	113	34	5,472	0	0	0
77 Finch U Hlth Sci Chicago	7,057	0	0	0	0	6,950	107	0	0
78 University of Denver	6,671	557	3,180	5	67	905	1,575	211	171
79 Hampton University	5,342	365	4,156	152	645	24	0	0	0
80 Marquette University	5,322	2,189	423	0	318	2,128	44	220	0
Total, 1st 80 insts.	6,761,481	1,039,221	727,127	287,117	433,991	3,833,768	93,784	231,587	114,886
81 Wesleyan University	5,112	0	2,451	288	90	1,857	217	209	0
82 Alfred University	4,712	4,712	0	0	0	0	0	0	0
83 Florida Inst of Tech	4,384	1,100	786	735	445	1,054	264	0	0
84 New Sch for Socl Res	4,383	0	0	0	0	184	445	3,754	0
85 Xavier University of LA	4,176	0	1,015	854	22	2,161	0	0	124
86 American University	3,226	0	977	0	30	967	317	935	0
87 Texas Christian U	3,110	33	834	33	29	216	1,943	22	0
88 Ponce School of Medicine	3,102	0	0	0	0	3,102	0	0	0
89 Seton Hall University	3,072	0i	916i	0i	0i	2,156i	0i	0i	0i
90 Clark University	2,711	0	1,512	689	56	131	246	77	0
Total, 1st 90 insts.	6,799,469	1,045,066	735,618	289,716	434,663	3,845,596	97,216	236,584	115,010
91 Bryn Mawr College	2,559	0	645	479	376	604	213	242	0
92 U of Detroit Mercy	2,527	518	847	871	0	0	0	0	291
93 Institute of Textile Tech	2,297	1,537	517	0	243	0	0	0	0
94 Fordham University	2,241	0	17	0	71	795	47	1,311	0
95 U Ctrl Del Caribe Esc Med	2,139	0	0	0	0	1,952	0	187	0
96 Johnson C Smith U	2,083	0i	1,022i	0i	0i	1,061i	0i	0i	0i
97 Hampshire College	1,978	627	301	91	346	48	5	528	32
98 Midwestern University	1,928	0	0	0	0	1,928	0	0	0
99 Smith College	1,920	0	351	78	211	840	136	304	0
100 Villanova University	1,848	476	244	0	54	780	210	84	0
Total, 1st 100 insts.	6,820,989	1,048,224	739,562	291,235	435,964	3,853,604	97,827	239,240	115,333
Total, all other sampled insts.	49,635	5,424	8,842	3,254	3,518	16,181	6,712	4,740	964
Estimated total non-sampled insts.	55,375	7,945	11,768	5,729	6,433	12,489	4,596	4,138	2,278

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
— = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-45. Federally financed R&D expenditures at private universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Total, all institutions	5,022,103	815,723	644,315	255,221	372,585	2,715,319	79,241	106,159	33,540
1 Johns Hopkins U	711,692	207,014	114,099	39,196	119,145	223,732	949	4,431	3,126
2 MA Institute of Tech	270,718	109,258	83,188	12,353	14,236	32,121	7,398	3,639	8,525
3 Stanford University	268,559	81,762	40,075	5,085	13,304	124,208	3,182	943	0
4 Columbia University	203,101	12,036	18,702	38,467	3,927	123,331	2,287	4,351	0
5 Cornell University	193,981	27,730	40,029	2,407	18,813	101,392	1,585	2,025	0
6 Harvard University	190,183	4,186	27,062	6,754	3,752	122,176	2,322	17,346	6,585
7 U of Pennsylvania	186,053	7,739	19,301	6	6,571	140,717	2,134	9,585	0
8 Yale University	171,425	4,946	17,009	1,878	4,649	139,449	2,660	834	0
9 U of Southern California	149,735	21,438	6,418	8,749	33,027	74,810	2,136	2,938	219
10 Duke University	148,350	5,683	10,688	2,435	2,227	110,864	5,226	11,227	0
Total, 1st 10 insts.	2,493,797	481,792	376,571	117,330	219,651	1,192,800	29,879	57,319	18.455
11 Washington University	138,299	2,563	6,139	2,532	4,874	120,518	817	856	0
12 University of Rochester	135,863	51,993	12,065	317	2,600	65,537	2,850	472	29
13 California Inst of Tech	112,502	20,799	49,691	13,481	6,394	20,863	0	721	553
14 University of Chicago	102,530	0	28,533	3,548	3,227	65,960	852	410	0
15 Case Western Reserve U	97,302	15,489	4,077	260	264	75,771	431	1,010	0
16 Vanderbilt University	92,439	8,327	6,809	61	606	71,988	2,387	2,261	0
17 Baylor Col of Medicine	92,404	0	0	0	0	92,404	0	0	0
18 University of Miami	91,563	945	1,287	22,716	353	58,336	1,488	6,434	4
19 New York University	89,013	0	2,991	195	9,651	70,854	4,091	1,144	87
20 Emory University	88,735	0	4,091	0	379	81,787	1,130	1,348	0
Total, 1st 20 insts.	3,534,447	581,908	492,254	160,440	247,999	1,916,818	43,925	71,975	19,128
21 Carnegie Mellon U	87,790	17,088	6,469	247	51,545	6,089	3,778	2,246	328
22 Northwestern University	83,684	13,578	9,078	565	4,348	46,146	1,539	640	7,790
23 Woods Hole Oceanograph	74,219	16,081	0	58,138	0	0	0	0	0
24 Boston University	72,551	5,881	8,545	845	2,716	51,295	126	660	2.483
25 Yeshiva University	70,718	0	0	0	0	70,718	0	0	0
26 Princeton University	58,544	13,833	17,382	4,837	6,381	10,058	4,087	1,966	0
27 CUNY Mt Sinai Sch Med	55,188	0	0	0	0	55,188	0	0	0
28 Georgetown University	54,992	0	3,757	593	493	47,943	67	1,934	205
29 Tufts University	49,672	2,419	2,176	0	139	43,115	1,172	651	0
30 Thomas Jefferson U	43,215	0	0	0	0	43,215	0	0	0
Total, 1st 30 insts.	4,185,020	650,788	539,661	225,665	313,621	2,290,585	54,694	80,072	29.934
31 Tulane University	42,354	3,508	1,362	24	420	30,968	218	5,581	273
32 Dartmouth College	41,762	4,711	2,389	823	699	31,791	992	243	114
33 University of Dayton	39,994	35,344	1,514	151	430	395	1,926	221	13
34 Rockefeller University	39,990	0	3,851	0	145	35,994	0	0	0
35 Brown University	36,864	6,288	4,171	4,275	5,746	14,561	1,033	790	0
36 Wake Forest University	36,722	0	896	0	63	35,720	0	0	43
37 Medical Col of Wisconsin	31,459	0	0	0	0	31,459	0	0	0
38 Rice University	25,672	2,516	7,276	2,759	9,603	3,160	304	54	0
39 George Washington U	24,379	5,165	721	73	5,449	9,637	513	2,623	198
40 Loyola U of Chicago	23,587	0	378	0	1,490	20,975	0	744	0
Total, 1st 40 insts.	4,527,803	708,320	562,219	233,770	337,666	2,505,245	59,680	90,328	30,575
41 Rensselaer Polytech Inst	22,090	15,390	3,955	685	1,408	341	35	155	121
42 Brandeis University	21,585	0	3,040	0	829	11,385	1,336	4,995	0
43 Syracuse University	19,309	5,832	3,752	988	2,012	4,341	468	1,454	462
44 St Louis University	18,120	4	0	736	64	17,316	0	0	0
45 University of Notre Dame	16,358	3,414	10,557	0	452	1,584	283	58	10
46 The Medical Col of PA	16,130	0	0	0	0	16,130	0	0	0
47 Northeastern University	16,037	6,823	3,337	0	1,417	3,201	922	337	0
48 Lehigh University	15,363	10,999	2,988	852	98	228	151	47	0
49 Howard University	15,196	2,436	2,767	0	311	7,419	838	1,068	357
50 New York Medical College	14,913	0	0	0	0	14,913	0	0	0
Total, 1st 50 insts.	4,702,904	753,218	592,615	237,031	344,257	2,582,103	63,713	98,442	31.525

See explanatory information and SOURCE at end of table.

Table B-45. Federally financed R&D expenditures at private universities and colleges, by science and engineering field: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
51 Rush University	14,831	0	0	0	0	13,410	1,421	0	0
52 Mercer University	11,115	10,434	0	0	0	681	0	0	0
53 Clark Atlanta University	11,025	1,220	3,437	117	1,782	4,331	0	138	0
54 Drexel University	11,006	6,828	1,142	1,448	474	706	0	408	0
55 Oregon Grad Inst Sci Tech	10,458	1,547	3,346	1,425	4,140	0	0	0	0
56 Med Col PA Hahnemann U	10,194	0	0	0	0	10,194	0	0	0
57 Med Col Hampton Roads	10,162	0	0	0	0	10,162	0	0	0
58 Meharry Medical College	10,154	0	0	1,561	0	8,593	0	0	0
59 Worcester Polytech Inst	9,584	3,753	207	0	5,408	129	0	87	0
60 Albany Medical College	8,344	0	0	0	0	8,344	0	0	0
Total, 1st 60 insts.	4,809,777	777,000	600,747	241,582	356,061	2,638,653	65,134	99,075	31,525
61 Brigham Young University	8,126	4,530	1,058	105	240	1,362	80	622	129
62 Boston College	7,938	0	2,524	499	3,792	853	126	144	0
63 C R Drew U of Med & Sci	7,674	0	0	0	0	7,674	0	0	0
64 Stevens Inst of Tech	7,644	6,623	719	0	0	0	0	302	0
65 Polytechnic University	6,872	4,234	1,273	0	1,365	0	0	0	0
66 Illinois Inst of Tech	6,738	2,911	581	241	217	2,719	14	0	55
67 Tuskegee University	6,694	835	531	0	0	5,328	0	0	0
68 Morehouse School of Med	6,663	0	0	0	0	6,493	0	0	170
69 University of Denver	6,144	520	2,901	0	65	891	1,556	211	0
70 Clarkson University	6,115	4,257	1,079	0	654	56	69	0	0
Total, 1st 70 insts.	4,880,385	800,910	611,413	242,427	362,394	2,664,029	66,979	100,354	31,879
71 Catholic U of America	6,058	1,109	3,728	0	0	376	510	335	0
72 Finch U Hlth Sci Chicago	5,214	0	0	0	0	5,136	78	0	0
73 Loma Linda University	5,082	0	0	71	0	5,011	0	0	0
74 Hampton University	5,078	365	3,905	139	645	24	0	0	0
75 Southern Methodist U	4,984	297	592	2,138	758	990	54	88	67
76 Creighton University	4,653	0	207	1	0	4,445	0	0	0
77 Xavier University of LA	4,176	0	1,015	854	22	2,161	0	0	124
78 University of Tulsa	3,319	1,300	410	489	55	848	121	96	0
79 Seton Hall University	3,072	0 i	916 i	0 i	0 i	2,156 i	0 i	0 i	0 i
80 American University	3,052	0	907	0	23	967	298	857	0
Total, 1st 80 insts.	4,925,073	803,981	623,093	246,119	363,897	2,686,143	68,040	101,730	32,070
81 Ponce School of Medicine	2,874	0	0	0	0	2,874	0	0	0
82 Wesleyan University	2,710	0	1,423	42	4	1,106	97	38	0
83 Marquette University	2,640	580	335	0	233	1,350	26	116	0
84 Texas Christian U	2,600	26	499	30	29	112	1,888	16	0
85 Rochester Inst of Tech	2,478	141 i	7 i	0 i	26 i	1,152 i	0 i	61 i	1,091 i
86 Clark University	2,301	0	1,442	509	56	81	151	62	0
87 Johnson C Smith U	1,803	0 i	885 i	0 i	0 i	918 i	0 i	0 i	0 i
88 Hofstra University	1,786	988	0	0	563	235	0	0	0
89 U Ctrl Del Caribe Esc Med	1,664	0	0	0	0	1,664	0	0	0
90 Florida Inst of Tech	1,654	399	436	181	69	569	0	0	0
Total, 1st 90 insts.	4,947,583	806,115	628,120	246,881	364,877	2,696,204	70,202	102,023	33,161
91 Inst Paper Sci and Tech	1,629	301	1,328	0	0	0	0	0	0
92 Loyola College	1,564	1,385	114	0	19	0	0	46	0
93 Wellesley College	1,537	0	304	0	70	857	0	306	0
94 Fisk University	1,514	0	1,411	0	0	103	0	0	0
95 Wentworth Inst of Tech	1,434	29	0	1,405	0	0	0	0	0
96 U of Detroit Mercy	1,339	263	168	713	0	0	0	0	195
97 Fordham University	1,304	0	13	0	21	535	0	735	0
98 Bryn Mawr College	1,294	0	308	185	47	384	182	188	0
99 Villanova University	1,061	200	187	0	54	410	210	0	0
100 Barnard College	1,031	0	36	0	62	189	743	1	0
Total, 1st 100 insts.	4,961,290	808,293	631,989	249,184	365,150	2,698,682	71,337	103,299	33,356
Total, all other sampled insts.	25,338	2,302	4,422	1,169	2,319	9,813	3,828	1,406	79
Estimated total non-sampled insts.	35,475	5,128	7,904	4,868	5,116	6,824	4,076	1,454	105

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-46. Total and federally financed R&D expenditures at historically black colleges and universities: fiscal years 1991-94

[Dollars in thousands]

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Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
Total, all institutions	211,439	191,369	178,777	150,763	174,561	157,207	146,624	122,682
1 Florida A&M University	24,691	22,777	22,230	18,552	20,730	18,954	18,698	15,592
2 Howard University	19,836	18,427	17,576	15,731	15,196	14,819	13,976	10,754
3 NC A&T State University	13,637	12,090	11,914	10,427	10,132	8,759	8,196	8,205
4 Clark Atlanta University	12,709	12,057	11,483	8,655	11,025	10,484	9,985	6,538
5 Alabama A&M University	11,098	9,316	7,053	6,699	8,954	7,295	5,635	5,481
6 Meharry Medical College	10,336	9,283	7,258	7,249	10,154	9,074	6,673	7,014
7 Prairie View A&M U	8,306	5,931	6,098	3,623	5,693	4,885	4,824	3,373
8 Morehouse School of Med	7,522	7,448	7,106	6,291	6,663	6,597	6,155	5,652i
9 Tuskegee University	7,121	5,500	4,800	4,426	6,694	5,154	4,498	4,137
10 Tennessee State U	6,916	5,252	4,475	3,709	6,031	5,245	4,465	3,701
Total, 1st 10 insts	122,172	108,081	99,993	85,362	101,272	91,266	83,105	70,447
11 Southern U A&M All Camp	6,512	6,837	6,813	5,942	4,620	4,828	4,407	4,332
12 Hampton University	5,342	4,597	3,272	3,345	5,078	4,597	3,272	3,345
13 South Carolina State Col	5,181	4,103	3,665	2,526	2,739	2,460	2,075	1,309
14 Jackson State University	4,697	4,371	4,065	3,912	4,220	3,831	3,849	3,429
15 Virginia State University	4,569	4,801	6,075	5,795	4,529	4,761	6,031	5,347
16 Xavier University of LA	4,176	3,169	2,379	2,424	4,176	3,145	2,365	2,424
17 Delaware State University	3,987	1,262	1,387	1,330	3,686	1,262	1,253	915
18 Albany State College	3,687e	3,733	2,339	1,172	675	1,068	627	536
19 Morgan State University	3,558	1,496	1,223	701	3,423	1,456	1,179	683
20 U Arkansas Pine Bluff	3,446	3,247	2,372	2,419	2,341	2,164	2,372	2,176
Total, 1st 20 insts	167,327	145,697	133,583	114,928	136,759	120,838	110,535	94,943
21 University of DC	3,211	3,055i	2,900	2,865	1,811e	1,705i	1,600	1,585
22 Lincoln University	3,121	2,958	3,194	3,027	2,869	2,726	2,851	2,763
23 Alcorn State University	3,099	3,129	2,517	2,041	3,039	3,038	2,132	1,665
24 U of the Virgin Islands	2,794	6,189	5,753i	5,318i	1,653	2,283	2,403i	2,521i
25 Kentucky State University	2,665	2,349	2,525	2,026	2,665	2,349	2,525	2,026
26 Fort Valley State College	2,648	2,749	2,711	2,370	2,591	2,413	2,384	2,047
27 Texas Southern U	2,612	4,220	2,329	2,101	2,353	3,652	2,028	1,810
28 Johnson C Smith U	2,083	377	276	475	1,803	377	276	454
29 Langston University	2,046	1,881	1,750	1,310	1,929	1,570	1,446	1,310
30 Central State University	1,791	1,889	1,691	1,640	1,180	1,272	930	680
Total, 1st 30 insts	193,397	174,493	159,229	138,101	158,652	142,223	129,110	111,804
31 Fisk University	1,631	1,502	1,317	641	1,514	1,418	1,235	616
32 Tougaloo College	1,502	1,415	1,302	1,262	745	636	702	684
33 U MD Eastern Shore	1,128	3,045	3,640	1,620	1,128	2,691	3,096	1,371
34 Spelman College	1,089	603	547	444	954	569	514	358
35 Benedict College	1,062	600	702	0	925	600	702	0
36 Alabama State University	1,055	534	614	448	1,026	528	502	442
37 Morris Brown College	1,010	1,227	1,341e	887	927	1,227	1,217e	442
38 Morehouse College	992	1,119	1,223	926	730	1,117	1,214	917
39 Winston Salem State U	940	529	583	617	780	529	583	617
40 Bowie State University	937	465	425	234	937	465	425	234
Total, 1st 40 insts	204,743	185,532	170,923	145,180	168,318	152,003	139,300	117,485
41 Selma University	740	420	798	650	740	420	798	650
42 Norfolk State University	671	566	793	752	671	566	769	726
43 Bethune Cookman College	507	221	626	599	358	218	590	548
44 Wilberforce University	505	200	--	--	505	200	--	--
45 Lincoln University (PA)	502	505	1,090	510	502	432	953	437
46 Fayetteville State U	437	273	187	275	437	273	187	275
47 Elizabeth City State U	418	1,050	341	0	241	605	339	0
48 North Carolina Central U	409	335	755	477i	409	313	683	441i
49 Rust College	389	346	798	289	389	346	798	271
50 Mississippi Valley St U	319	213	71	64	319	213	71	64
Total, 1st 50 insts	209,640	189,661	176,382	148,796	172,889	155,589	144,488	120,897

See explanatory information and SOURCE at end of table.

Table B-46. Total and federally financed R&D expenditures at historically black colleges and universities: fiscal years 1991-94

[Dollars in thousands]

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Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
51 West Virginia State Col	241	190	179	218	195	161	172	210
52 Jarvis Christian College	219	336	97	60	219	336	97	60
53 Coppin State College	218	77	103	212	218	77	103	212
54 Grambling State U	209	210	277i	343i	155	155	164i	173i
55 Oakwood College	161	186	206	179	161	186	206	179
56 Philander Smith College	157	157	145	154	137	157	136	154
57 Savannah State College	128	173	195	212	128	168	195	212
58 Bennett College	112	123	914	64	105	122	784	62
59 Dillard University	110	0	0	0	110	0	0	0
60 Claflin College	103	180	240	383	103	180	240	381
Total, 1st 60 insts.	211,298	191,293	178,738	150,621	174,420	157,131	146,585	122,540
61 Knoxville College	85	23e	33i	42i	85	23i	33i	42i
62 Shaw University	56	53	6	0	56	53	6	0
63 Talladega College	0	0	0	0	0	0	0	0
64 Trenholm State Tech Col	0	0	0	100	0	0	0	100
65 Voorhees College	0	0	0	0	0	0	0	0
Total, 1st 65 insts.	211,439	191,369	178,777	150,763	174,561	157,207	146,624	122,682

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-47. Total and federally financed R&D expenditures in engineering at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

Page 1 of 2

Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
Total, all institutions	3,323,766	3,152,369	3,060,109	2,902,511	1,972,753	1,858,718	1,752,152	1,637,779
1 Johns Hopkins U	210,522	203,064	225,382	216,567	207,014	198,765	220,774	211,994
2 MA Institute of Tech	153,530	155,174	140,969	132,421	109,258	107,423	93,025	87,421
3 Pennsylvania State U	129,313	118,454	119,878	120,336	85,836	79,610	77,248	78,021
4 Georgia Institute of Tech	125,004	115,523	122,215	124,708	62,671	64,634	68,676	71,606
5 U TX Austin	106,743	99,240	85,430	86,521	61,596	55,324	48,462	43,157
6 Stanford University	92,946	90,770	107,500	92,511	81,762	78,061	79,342	73,304
7 University of Michigan	88,837	74,735	64,901	63,841	54,368	44,668	36,413	36,653
8 Texas A&M University	82,565	77,413	77,462	65,627	22,788	19,249	17,648	12,826
9 U CA Berkeley	61,654	62,019	62,178	57,481	33,108	31,539	29,710	29,047
10 NC State U Raleigh	58,871	48,244	44,797	46,343	26,734	21,715	18,135	17,192
Total, 1st 10 insts.	1,109,985	1,044,636	1,050,712	1,006,356	745,135	700,988	689,433	661,221
11 University of Rochester	55,780	46,716	29,559	22,304	51,993	42,751	25,786	19,284
12 U WI Madison	55,021	49,723	46,312	43,341	34,375	31,278	28,565	25,715
13 University of IL Urbana	51,634	53,304	53,044	54,694	30,946	30,388	28,768	29,347
14 Ohio State University	51,162	44,967	43,764	43,054	17,182	15,251	16,395	15,808
15 Purdue University	47,809	40,454	37,949	35,130	26,369	23,700	22,140	19,814
16 U MD College Park	47,556	48,698	47,806	36,868	22,912	21,463	22,857	16,331
17 Iowa State University	44,152	35,955	31,512	36,768	20,444	15,469	14,732	12,747
18 VA Polytech Inst & St U	43,623	45,671	49,830	48,407	21,304	23,698	25,142	24,273
19 New Mexico State U	43,255	45,450	46,532	44,091	36,840	38,316	39,864	37,980
20 University of Dayton	41,734	40,390	36,186	33,660	35,344	34,658	30,744	27,703
Total, 1st 20 insts.	1,591,711	1,495,964	1,473,206	1,404,673	1,042,844	977,960	944,426	890,223
21 Cornell University	41,416	43,369	43,951	43,632	27,730	28,923	27,932	24,456
22 University of New Mexico	36,271	30,509	26,979	22,083	21,572	17,595	17,494	11,226
23 University of Minnesota	30,625	28,856	26,053	27,460	18,885	15,735	12,894	10,524
24 University of Florida	30,220	28,912	24,476	29,445	14,070	12,802	11,261	13,936
25 U of Tennessee System	29,887	30,248	27,569	30,817	14,379	15,796	15,725	15,411
26 University of Connecticut	29,561	24,452	23,024	22,912	4,381	3,348	3,488	2,649
27 U CA Los Angeles	29,544	27,799	28,471	25,715	22,473	20,057	20,499	19,259
28 U CA Santa Barbara	28,477	23,798	23,647	20,648	24,538	19,349	19,643	16,677
29 Carnegie Mellon U	28,153	26,178	27,183	24,615	17,088	14,920	14,832	14,021
30 U of Southern California	26,861	27,576	26,816	24,010	21,438	22,262	20,511	19,446
Total, 1st 30 insts.	1,902,726	1,787,661	1,751,375	1,676,010	1,229,398	1,148,747	1,108,705	1,037,828
31 University of Colorado	26,666	22,942	22,714	21,550	14,781	13,650	14,160	13,920
32 Rensselaer Polytech Inst	26,012	31,787	37,898	37,927	15,390	15,924	18,149	17,692
33 Utah State University	25,448	24,093	38,155	44,842	21,917	20,185	31,565	40,709
34 Rutgers the State U NJ	25,389	18,932	24,726	24,591	13,601	6,365	7,836	6,863
35 Case Western Reserve U	24,859	24,957	25,066	23,770	15,489	16,223	15,877	15,564
36 Princeton University	24,454	24,791	21,289	20,134	13,833	12,834	10,989	10,283
37 Clemson University	24,055	24,798	23,977	18,715	7,581	7,354	6,327	5,134
38 SUNY Buffalo	23,271	23,732	28,827	22,881	6,530	9,223	7,930	7,579
39 California Inst of Tech	23,093	20,384	19,203	17,931	20,799	18,084	16,783	15,677
40 Louisiana St U, All Camp	22,781	24,145	22,443	31,768	4,957	6,548	6,255	18,351
Total, 1st 40 insts.	2,148,754	2,028,222	2,015,673	1,940,119	1,364,276	1,275,137	1,244,576	1,189,600
41 University of Houston	21,961	23,058	25,305	23,320	9,832	11,629	10,821	9,353
42 Lehigh University	21,795	23,087	23,621	20,185	10,999	12,109	12,919	7,703
43 Northwestern University	21,630	21,017	20,049	19,603	13,578	13,836	11,812	10,294
44 University of Virginia	21,542	19,700	18,988	17,748	14,337	12,607	11,675	10,565
45 Auburn University	21,299	19,690	18,156	22,182	7,151	7,310	6,366	6,646
46 University of Arizona	20,659	20,093	19,539	18,080	10,734	9,223	8,840	7,394
47 University of Washington	20,332	18,451	18,352	20,497	11,149	10,043	10,061	12,912
48 Oklahoma State University	19,753	16,433	14,335	13,203	8,773	8,713	4,524	6,027
49 Arizona State University	19,555	21,893	21,491	20,129	6,637	6,584	5,915	5,400
50 University of Cincinnati	19,430	19,746	19,056	15,961	11,264	11,822	11,152	7,903
Total, 1st 50 insts.	2,356,710	2,231,390	2,214,565	2,131,027	1,468,730	1,379,013	1,338,661	1,273,797

See explanatory information and SOURCE at end of table.

Table B-47. Total and federally financed R&D expenditures in engineering at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

Page 2 of 2

Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
51 Michigan State University	18,223	18,114	16,382	15,340 i	8,501	8,440	5,618	5,211 i
52 Mississippi State U	17,936	15,993	18,116	15,360	12,470	11,256	13,499	10,243
53 U of Iowa	17,841	15,181	12,214	10,805	10,074	7,073	5,402	4,102
54 Woods Hole Oceanograph	17,371	16,999	13,129	12,165 i	16,081	15,848	12,444	10,461 i
55 University of Kentucky	16,900	16,729	16,601	14,610	6,047	6,607	6,188	3,858
56 Colorado State University	16,437	16,137	15,636	16,406	7,157	8,800	8,461	11,117
57 U CA San Diego	15,806	13,738	6,173	5,624	11,561	10,920	3,960	3,140
58 University of Utah	15,636	16,679	14,501	15,116	10,632	10,830	8,315	9,070
59 Michigan Tech University	14,714	11,940 i	11,827	12,326	6,407	5,422 i	4,568	3,855
60 U CA Davis	14,709	15,487	12,364	9,634	6,069	7,728	6,447	5,293
Total, 1st 60 insts	2,522,283	2,388,387	2,351,508	2,258,413	1,563,729	1,471,937	1,413,563	1,340,147
61 University of Delaware	14,668	16,231	12,198	12,528	6,926	8,472	4,286	4,561
62 NM Inst Mining & Tech	14,617	16,757	16,797	16,445 i	5,445	3,191	4,488	3,503 i
63 U of Nebraska Lincoln	14,565	11,263	12,141	12,377	2,054	1,603	1,386	1,450
64 Columbia University	14,407	14,743	17,526	16,785	12,036	12,251	13,873	10,828
65 University of Oklahoma	14,059	14,512	13,866	11,712	4,340	4,556	3,857	3,076
66 U of Missouri Rolla	14,015	13,706	11,465	10,286	4,753	4,438	3,199	3,197
67 U of South Carolina	13,459	9,314	10,161	14,260	6,665	4,370	4,805	4,297
68 Syracuse University	13,214	9,938	5,325	5,255	5,832	4,367	1,667	1,563
69 West Virginia University	13,108	11,184	9,812	7,005	8,537	7,146	6,194	3,492
70 U of Alabama Huntsville	12,636	15,097	13,206	12,781	8,225	10,578	9,255	9,175
Total, 1st 70 insts.	2,661,031	2,521,132	2,474,005	2,377,847	1,628,542	1,532,909	1,466,573	1,385,289
71 Mercer University	12,411	11,784	9,157	7,184	10,434	9,579	6,835	6,261
72 U of Missouri Columbia	12,381	12,362	10,702	9,937	3,063	2,751	2,667	2,167
73 Drexel University	12,143	13,027	13,978	12,506	6,828	7,706	6,445	4,957
74 Oregon State University	12,107	9,801	9,169	8,226	4,983	3,634	4,411	4,263
75 U of Pennsylvania	11,918	14,934	14,469	10,620	7,739	10,471	9,895	6,960
76 U of South Florida	11,697	10,726	12,458	16,945	4,057	2,987	4,163	10,343
77 Stevens Inst of Tech	11,592	13,367	13,791	7,469	6,623	9,978	4,937	2,600
78 Colorado School of Mines	11,035	10,588	8,320	8,648	6,298	5,095	3,777	4,227
79 U of Central Florida	10,747	5,908	4,885	5,418	1,400	2,232	1,501	1,171
80 Vanderbilt University	10,579	8,591	8,309	8,554	8,327	6,813	6,110	5,908
Total, 1st 80 insts.	2,777,641	2,632,220	2,579,243	2,473,354	1,688,294	1,594,155	1,517,314	1,434,146
81 University North Dakota	10,433	10,768	10,011	8,361	9,569	9,371	9,090	7,740
82 U Arkansas Main	10,220	8,733	7,981	5,710	3,675	1,941	2,105	2,457
83 U MA Amherst	9,962	9,629	10,479	--	4,811	4,760	5,603	--
84 U TX Arlington	9,764	9,262	8,285	8,240	2,281	2,236	1,571	1,355
85 U CA Irvine	9,754	8,655	6,101	5,171	4,478	3,662	3,006	2,752
86 Texas Tech University	9,513	9,927	8,806	8,902	2,325	2,341	2,325	2,419
87 Kansas State University	9,355	9,091	8,397	6,635	3,067	2,382	2,517	1,615
88 Washington State U	9,185	8,762	7,623	6,792	5,575	4,391	3,732	2,774
89 NJ Inst of Technology	8,952	7,429	5,215	6,614	3,393	3,097	1,151	1,624
90 The University of Alabama	8,932	7,422	7,707	5,996	5,214	3,508	3,197	1,970
Total, 1st 90 insts.	2,873,711	2,721,898	2,659,848	2,535,775	1,732,682	1,631,844	1,551,611	1,458,852
91 Tulane University	8,829	7,054	6,682	4,317	3,508	2,715	2,054	1,405
92 Ohio University	8,606	8,767	8,294	6,678	3,011	3,052	3,135	2,519
93 Brown University	8,550	9,073	9,707	9,936	6,288	6,532	7,304	7,144
94 University of IL Chicago	8,364	8,056	8,795	7,940	3,452	2,596	2,318	2,566
95 University of Pittsburgh	8,171	8,740	8,247	6,514	5,324	5,349	4,132	3,179
96 NC A&T State University	7,901	7,351	6,720	5,753	5,667	4,889	4,154	4,049
97 Tennessee Tech U	7,843	8,028	8,372	8,242	669	709	920	324
98 Polytechnic University	7,795	6,828 i	6,684	6,683	4,234	4,728 i	4,140	4,140
99 Boston University	7,732	7,049	5,579	4,677	5,881	5,565	4,148	3,124
100 Wayne State University	7,704	7,014	5,758	5,624	2,338	2,110	1,709	2,009
Total, 1st 100 insts.	2,955,206	2,799,858	2,734,686	2,602,139	1,773,054	1,670,089	1,585,625	1,489,311
Total, all other sampled insts.	346,748	352,511	325,423	300,372	184,973	188,629	166,527	148,468
Estimated total non-sampled insts.	21,812	0	0	0	14,726	0	0	0

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-48. R&D expenditures in engineering subfields at universities and colleges: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Aero/astronautical	Chemical	Civil	Electrical	Mechanical	Metallurgical and materials	Other
Total, all institutions	3,323,766	217,826	275,850	391,847	725,459	494,350	317,847	900,588
1 Johns Hopkins U	210,522	20,709 i	4,768 i	4,476 i	64,182 i	43,133 i	458 i	72,796 i
2 MA Institute of Tech	153,530	22,367	14,688	13,500	54,176	14,721	9,987	24,091
3 Pennsylvania State U	129,313	1,461	3,456	5,727	4,793	13,892	17,209	82,775
4 Georgia Institute of Tech	125,004	15,221	3,857	6,618	57,158	14,182	8,560	19,408
5 U TX Austin	106,743	7,036	7,766	16,600	8,808	19,545	2,632	44,356
6 Stanford University	92,946	5,309	3,943	6,018	29,661	9,333	1,887	36,795
7 University of Michigan	88,837	3,619	2,551	8,326	35,692	15,289	6,485	16,875
8 Texas A&M University	82,565	4,224	10,371	26,020	5,299	9,552	3,621	23,478
9 U CA Berkeley	61,654	0	1,478	15,949	28,909	4,637	2,839	7,842
10 NC State U Raleigh	58,871	0	4,986	8,449	11,546	5,849	16,494	11,547
Total, 1st 10 insts.	1,109,985	79,946	57,864	111,683	300,224	150,133	70,172	339,963
11 University of Rochester	55,780	0	766	0	2,779	47,200	0	5,035
12 U WI Madison	55,021	0	5,742	1,942	11,304	2,808	2,378	30,847
13 University of IL Urbana	51,634	1,794	2,257	6,996	10,087	8,797	17,936	3,767
14 Ohio State University	51,162	1,749	1,982	1,682	6,336	6,361	6,451	26,601
15 Purdue University	47,809	2,992	4,153	6,161	8,505	8,245	3,728	14,025
16 U MD College Park	47,556	4,907	748	3,103	8,640	6,186	4,135	19,837
17 Iowa State University	44,152	1,196	845	8,079	3,280	2,469	1,469	26,814
18 VA Polytech Inst & St U	43,623	2,896	1,855	4,281	8,933	10,022	4,861	10,775
19 New Mexico State U	43,255	19,385	5,255	2,137	8,639	3,822	2,018	1,999
20 University of Dayton	41,734	13,279	4,019	6	2,703	8,508	9,367	3,852
Total, 1st 20 insts.	1,591,711	128,144	85,486	146,070	371,430	254,551	122,515	483,515
21 Cornell University	41,416	4,860	2,540	3,475	10,846	977	3,838	14,880
22 University of New Mexico	36,271	0	2,512	14,185	5,673	794	6,974	6,133
23 University of Minnesota	30,625	2,336	10,946	5,725	4,661	5,305	0	1,652
24 University of Florida	30,220	1,945	2,105	5,331	4,117	2,282	5,696	8,744
25 U of Tennessee System	29,887	3,732	7,391	7,697	2,279	857	2,190	5,741
26 University of Connecticut	29,561	0	351	7,256	2,831	941	15,993	2,189
27 U CA Los Angeles	29,544	0	1,688	2,488	10,908	12,193	1,923	344
28 U CA Santa Barbara	28,477	0	4,024	0	11,676	2,403	10,189	185
29 Carnegie Mellon U	28,153	0	1,540	1,588	12,209	2,263	3,543	7,010
30 U of Southern California	26,861	2,594	440	1,372	13,766	568	1,350	6,771
Total, 1st 30 insts.	1,902,726	143,611	119,023	195,187	450,396	283,134	174,211	537,164
31 University of Colorado	26,666	7,929	2,397	4,762	9,368	1,735	235	240
32 Rensselaer Polytech Inst	26,012	0	1,902	3,775	5,725	7,662	2,312	4,636
33 Utah State University	25,448	0	0	1,339	21,667	817	0	1,625
34 Rutgers the State U NJ	25,389	655	2,682	254	7,690	3,446	9,102	1,560
35 Case Western Reserve U	24,859	0	9,570	428	4,030	2,687	4,131	4,013
36 Princeton University	24,454	8,107	2,861	3,364	7,292	0	2,560	270
37 Clemson University	24,055	0	1,378	5,287	3,322	2,674	0	11,394
38 SUNY Buffalo	23,271	0	1,499	11,211	2,426	5,391	0	2,744
39 California Inst of Tech	23,093	3,637	3,274	572	3,274	1,315	946	10,075
40 Louisiana St U, All Camp	22,781	0	2,559	3,234	1,954	903	5,925	8,206
Total, 1st 40 insts.	2,148,754	163,939	147,145	229,413	517,144	309,764	199,422	581,927
41 University of Houston	21,961	6,348	2,633	1,125	1,293	2,818	7,406	338
42 Lehigh University	21,795	0	3,397	5,511	2,564	4,418	4,611	1,294
43 Northwestern University	21,630	0	1,773	2,311	2,530	1,027	4,220	9,769
44 University of Virginia	21,542	1,202	1,532	2,032	3,275	3,258	6,700	3,543
45 Auburn University	21,299	6,958	2,662	4,030	1,367	3,337	1,375	1,570
46 University of Arizona	20,659	2,393	1,356	5,022	4,801	0	3,322	3,765
47 University of Washington	20,332	2,123	1,800	4,744	5,058	1,652	790	4,165
48 Oklahoma State University	19,753	219	5,697	2,721	2,722	2,980	0	5,414
49 Arizona State University	19,555	347	2,314	2,404	7,837	3,884	30	2,739
50 University of Cincinnati	19,430	1,598	1,065	8,647	3,212	2,112	2,796	0
Total, 1st 50 insts.	2,356,710	185,127	171,374	267,960	551,803	335,250	230,672	614,524

See explanatory information and SOURCE at end of table.

Table B-48. R&D expenditures in engineering subfields at universities and colleges: fiscal year 1994

[Dollars in thousands]

Page 2 of 2

Institution and ranking	Total	Aero/ astro- nautical	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgical and materials	Other
51 Michigan State University	18,223	0	1,830	0	303	0	3,963	12,127
52 Mississippi State U	17,936	1,820	1,289	550	578	416	0	13,283
53 U of Iowa	17,841	0	1,488	4,322	900	9,525	0	1,606
54 Woods Hole Oceanograph	17,371	1,240 i	1,329 i	1,364 i	4,451 i	3,500 i	0 i	5,487 i
55 University of Kentucky	16,900	0	395	282	336	1,190	0	14,697
56 Colorado State University	16,437	0	2,788	6,515	2,741	4,123	0	270
57 U CA San Diego	15,806	0	0	0	0	5,536	0	10,270
58 University of Utah	15,636	0	2,624	373	877	4,310	3,259	4,193
59 Michigan Tech University	14,714	0	2,085	3,292	503	3,915	2,621	2,298
60 U CA Davis	14,709	0	1,972	4,799	2,147	3,475	0	2,316
Total, 1st 60 insts.	2,522,283	188,187	187,174	289,457	564,639	371,240	240,515	681,071
61 University of Delaware	14,668	0	4,028	1,582	2,375	741	5,433	509
62 NM Inst Mining & Tech	14,617	0	3,787	0	66	0	1,007	9,757
63 U of Nebraska Lincoln	14,565	0	599	3,493	2,636	750	3,408	3,679
64 Columbia University	14,407	0	2,144	376	6,110	199	1,031	4,547
65 University of Oklahoma	14,059	0	6,803	3,043	1,787	1,378	0	1,048
66 U of Missouri Rolla	14,015	0	736	989	787	2,274	7,482	1,747
67 U of South Carolina	13,459	0	2,613	919	1,957	7,626	0	344
68 Syracuse University *	13,214	115	1,817	838	1,178	2,229	167	6,870
69 West Virginia University	13,108	0	11	2,561	1,224	5,807	975	2,530
70 U of Alabama Huntsville	12,636	0	1,399	27	1,941	6,363	78	2,828
Total, 1st 70 insts.	2,661,031	188,302	211,111	303,285	584,700	398,607	260,096	714,930
71 Mercer University	12,411	3,651	279	0	1,359	5,895	0	1,227
72 U of Missouri Columbia	12,381	0	834	1,923	905	983	916	6,820
73 Drexel University	12,143	0	547	1,443	2,492	1,651	2,354	3,656
74 Oregon State University	12,107	0	553	2,048	1,784	1,704	0	6,018
75 U of Pennsylvania	11,918	0	1,193	10	1,826	1,025	3,697	4,167
76 U of South Florida	11,697	0	164	6,568	4,428	293	0	244
77 Stevens Inst of Tech	11,592	0	1,109	412	1,123	4,379	1,026	3,543
78 Colorado School of Mines	11,035	0	2,735	0	0	0	7,526	774
79 U of Central Florida	10,747	428	0	1,287	771	851	0	7,410
80 Vanderbilt University	10,579	0	654	1,395	3,148	1,712	2,656	1,014
Total, 1st 80 insts.	2,777,641	192,381	219,179	318,371	602,536	417,100	278,271	749,803
81 University North Dakota	10,433	0	33	11	45	23	93	10,228
82 U Arkansas Main	10,220	0	1,014	1,877	4,157	485	0	2,687
83 U MA Amherst	9,962	0	1,627	1,741	3,894	1,693	0	1,007
84 U TX Arlington	9,764	567	0	340	3,742	1,295	0	3,820
85 U CA Irvine	9,754	0	0	4,257	1,588	3,451	0	458
86 Texas Tech University	9,513	0	920	2,240	2,224	589	2,266	1,274
87 Kansas State University	9,355	0	1,919	1,161	600	583	0	5,092
88 Washington State U	9,185	0	680	1,935	2,510	1,548	263	2,249
89 NJ Inst of Technology	8,952	0	2,280	1,217	1,972	599	0	2,884
90 The University of Alabama	8,932	1,463	1,932	430	623	1,319	1,387	1,778
Total, 1st 90 insts.	2,873,711	194,411	229,584	333,580	623,891	428,685	282,280	781,280
91 Tulane University	8,829	0	2,133	1,477	858	2,455	0	1,906
92 Ohio University	8,606	0	1,878	1,327	4,374	458	0	569
93 Brown University	8,550	610 i	629 i	662 i	2,097 i	1,877 i	0 i	2,675 i
94 University of IL Chicago	8,364	0	495	1,352	4,858	1,538	0	121
95 University of Pittsburgh	8,171	0	2,630	459	679	471	1,412	2,520
96 NC A&T State University	7,901	0	354	533	1,994	2,316	0	2,704
97 Tennessee Tech U	7,843	0	61	3,128	1,885	2,464	0	305
98 Polytechnic University	7,795	341	1,483	855	3,847	748	423	98
99 Boston University	7,732	245	0	0	1,842	399	115	5,131
100 Wayne State University	7,704	0	1,003	425	1,237	1,750	160	3,129
Total, 1st 100 insts.	2,955,206	195,607	240,250	343,798	647,562	443,161	284,390	800,438
Total, all other sampled insts.	346,748	20,741	35,346	44,364	72,080	49,060	33,177	91,980
Estimated total non-sampled insts.	21,812	1,478	254	3,685	5,817	2,129	280	8,170

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-49. Federally financed R&D expenditures in engineering subfields at universities and colleges: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Aero/astronautical	Chemical	Civil	Electrical	Mechanical	Metallurgical and materials	Other
Total, all institutions	1,972,753	165,402	150,660	158,067	480,467	322,440	156,461	539,254
1 Johns Hopkins U	207,014	20,456 i	4,409 i	3,266 i	63,752 i	42,704 i	351 i	72,076 i
2 MA Institute of Tech	109,258	18,878	10,157	10,024	42,408	7,107	6,054	14,630
3 Pennsylvania State U	85,836	889	1,731	943	2,528	6,844	8,938	63,963
4 Stanford University	81,762	4,685	3,564	5,209	25,096	8,326	1,145	33,737
5 Georgia Institute of Tech	62,671	7,631	1,934	3,318	28,656	7,110	4,291	9,731
6 U TX Austin	61,596	5,590	3,206	1,691	4,107	14,401	1,629	30,972
7 University of Michigan	54,368	2,398	1,420	5,495	23,430	9,551	4,838	7,236
8 University of Rochester	51,993	0	535	0	2,359	45,650	0	3,449
9 New Mexico State U	36,840	18,011	4,721	1,432	6,179	3,500	1,883	1,114
10 University of Dayton	35,344	12,671	3,721	0	2,328	4,888	8,104	3,632
Total, 1st 10 insts.	786,682	91,209	35,398	31,378	200,843	150,081	37,233	240,540
11 U WI Madison	34,375	0	3,203	820	6,262	1,364	882	21,844
12 U CA Berkeley	33,108	0	849	3,775	19,556	3,645	1,857	3,426
13 University of IL Urbana	30,946	1,414	1,356	3,709	7,882	3,886	10,295	2,404
14 Cornell University	27,730	3,027	1,718	1,428	6,820	856	3,304	10,577
15 NC State U Raleigh	26,734	0	2,163	2,325	5,853	3,933	8,092	4,368
16 Purdue University	26,369	2,089	2,145	3,058	4,750	4,027	3,182	7,118
17 U CA Santa Barbara	24,538	0	3,222	0	10,016	2,261	8,966	73
18 U MD College Park	22,912	2,767	55	1,001	3,977	2,670	2,015	10,427
19 Texas A&M University	22,788	2,399	1,974	3,248	1,668	1,922	16	11,561
20 U CA Los Angeles	22,473	0	1,192	662	8,138	10,981	1,500	0
Total, 1st 20 insts.	1,058,655	102,905	53,275	51,404	275,765	185,626	77,342	312,338
21 Utah State University	21,917	0	0	521	20,056	579	0	761
22 University of New Mexico	21,572	0	1,601	7,874	3,140	409	3,939	4,609
23 U of Southern California	21,438	2,392	304	540	11,591	488	1,226	4,897
24 VA Polytech Inst & St U	21,304	2,223	491	1,392	2,979	5,455	2,395	6,369
25 California Inst of Tech	20,799	3,587	2,172	512	3,163	1,184	917	9,264
26 Iowa State University	20,444	853	499	2,655	1,208	1,275	701	13,253
27 University of Minnesota	18,885	1,910	8,131	2,257	3,565	2,850	0	172
28 Ohio State University	17,182	441	695	422	2,790	2,763	2,366	7,705
29 Carnegie Mellon U	17,088	0	1,050	955	7,082	1,685	2,047	4,269
30 Woods Hole Oceanograph	16,081	1,149 i	1,253 i	1,267 i	4,198 i	3,116 i	0 i	5,098 i
Total, 1st 30 insts.	1,255,365	115,460	69,471	69,799	335,537	205,430	90,933	368,735
31 Case Western Reserve U	15,489	0	5,422	229	2,462	2,216	2,742	2,418
32 Rensselaer Polytech Inst	15,390	0	1,175	2,216	3,213	4,486	1,420	2,880
33 University of Colorado	14,781	4,828	1,234	2,375	4,967	1,097	72	208
34 U of Tennessee System	14,379	856	5,057	2,696	1,702	341	813	2,914
35 University of Virginia	14,337	1,094	1,033	1,586	2,091	1,740	5,010	1,783
36 University of Florida	14,070	1,497	1,115	968	2,054	1,394	3,661	3,381
37 Princeton University	13,833	5,622	1,460	1,536	3,693	0	1,500	22
38 Rutgers the State U NJ	13,601	582	1,422	102	6,014	3,050	1,969	462
39 Northwestern University	13,578	0	1,300	1,522	2,124	685	3,201	4,746
40 Mississippi State U	12,470	373	1,161	172	400	199	0	10,165
Total, 1st 40 insts.	1,397,293	130,312	89,850	83,201	364,257	220,638	111,321	397,714
41 Columbia University	12,036	0	705	350	5,619	137	1,007	4,218
42 U CA San Diego	11,561	0	0	0	0	4,169	0	7,392
43 University of Cincinnati	11,264	1,258	453	5,345	2,001	936	1,271	0
44 University of Washington	11,149	1,708	781	2,296	2,627	1,352	319	2,066
45 Lehigh University	10,999	0	504	3,836	1,568	2,388	2,613	90
46 University of Arizona	10,734	1,674	708	3,725	1,326	0	1,843	1,458
47 University of Utah	10,632	0	1,277	206	600	3,636	2,354	2,559
48 Mercer University	10,434	2,120	279	0	1,357	5,585	0	1,093
49 U of Iowa	10,074	0	797	1,442	498	6,315	0	1,022
50 University of Houston	9,832	4,840	1,296	612	603	1,919	457	105
Total, 1st 50 insts.	1,506,008	141,912	96,650	101,013	380,456	247,075	121,185	417,717

See explanatory information and SOURCE at end of table.

Table B-49. Federally financed R&D expenditures in engineering subfields at universities and colleges: fiscal year 1994

[Dollars in thousands]

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Institution and ranking	Total	Aero/ astro-nautical	Chemical	Civil	Elec-trical	Mechan-ical	Metal-lurgical and materials	Other
51 University North Dakota	9,569	0	0	0	45	9	37	9,478
52 Oklahoma State University	8,773	34	4,425	127	473	534	0	3,180
53 West Virginia University	8,537	0	0	1,423	952	4,123	478	1,561
54 Michigan State University	8,501	0	1,278	0	0	0	0	7,223
55 Vanderbilt University	8,327	0	487	900	2,292	1,267	2,526	855
56 U of Alabama Huntsville	8,225	0	1,103	15	1,235	4,018	31	1,823
57 U of Pennsylvania	7,739	0	693	0	1,136	727	2,146	3,037
58 Clemson University	7,581	0	434	1,666	1,047	843	0	3,591
59 Colorado State University	7,157	0	1,568	2,798	1,557	1,132	0	102
60 Auburn University	7,151	4,526	443	561	647	880	0	94
Total, 1st 60 insts.	1,587,568	146,472	107,081	108,503	389,840	260,608	126,403	448,661
61 University of Delaware	6,926	0	1,303	677	1,711	236	2,873	126
62 US Naval Postgrad School	6,833	2,966	0	0	2,422	1,254	191	0
63 Drexel University	6,828	0	192	713	1,335	909	1,267	2,412
64 Northeastern University	6,823	0	801	312	4,763	161	0	786
65 U of South Carolina	6,665	0	1,869	453	1,126	3,016	0	201
66 Arizona State University	6,637	0	1,187	617	2,466	2,039	0	328
67 Stevens Inst of Tech	6,623	0	586	45	604	3,709	342	1,337
68 SUNY Buffalo	6,530	0	678	3,740	877	927	0	308
69 Michigan Tech University	6,407	0	349	2,048	231	2,303	929	547
70 Colorado School of Mines	6,298	0	1,879	0	0	0	3,752	667
Total, 1st 70 insts.	1,654,138	149,438	115,925	117,108	405,375	275,162	135,757	455,373
71 Brown University	6,288	450 i	484 i	497 i	1,649 i	1,219 i	0 i	1,989 i
72 U CA Davis	6,069	0	1,222	961	1,071	1,189	0	1,626
73 University of Kentucky	6,047	0	309	127	274	954	0	4,383
74 Boston University	5,881	216	0	0	942	261	6	4,456
75 Syracuse University	5,832	66	761	242	852	468	0	3,443
76 Duke University	5,683	0	0	182	529	1,102	0	3,870
77 NC A&T State University	5,667	0	236	369	1,655	1,457	0	1,950
78 Washington State U	5,575	0	387	964	1,451	1,284	195	1,294
79 NM Inst Mining & Tech	5,445	0	1,158	0	40	0	131	4,116
80 University of Pittsburgh	5,324	0	1,776	283	526	313	1,140	1,286
Total, 1st 80 insts.	1,711,949	150,170	122,258	120,733	414,364	283,409	137,229	483,786
81 The University of Alabama	5,214	1,158	1,512	281	210	558	736	759
82 George Washington U	5,165	2,048	0	0	1,045	4	1	2,067
83 George Mason University	5,145	0	0	0	574	0	0	4,571
84 Oregon State University	4,983	0	302	1,325	843	799	0	1,714
85 Louisiana St U, All Camp	4,957	0	1,587	859	282	288	5	1,936
86 Yale University	4,946	0	1,239	0	1,209	1,493	0	1,005
87 U MA Amherst	4,811	0	752	285	2,837	822	0	115
88 U of Missouri Rolla	4,753	0	218	468	240	878	2,536	413
89 Dartmouth College	4,711	0	0	1,098	1,013	214	1,589	797
90 U of Nevada Reno	4,640	41	0	1,091	63	19	2,432	994
Total, 1st 90 insts.	1,761,274	153,417	127,868	126,140	422,680	288,484	144,528	498,157
91 Brigham Young University	4,530	0	2,962	554	647	202	0	165
92 U CA Irvine	4,478	0	0	666	848	2,641	0	323
93 University of Connecticut	4,381	0	83	1,241	915	247	1,290	605
94 Florida Atlantic U	4,374	0	0	0	2,268	243	0	1,863
95 Florida International U	4,349	0	0	478	1,398	2,473	0	0
96 University of Oklahoma	4,340	0	2,567	749	484	312	0	228
97 Clarkson University	4,257	0	1,999	924	355	979	0	0
98 Polytechnic University	4,234	326	626	438	2,269	160	317	98
99 Harvard University	4,186	0	0	0	0	0	0	4,186
100 U of South Florida	4,057	0	11	1,887	1,986	151	0	22
Total, 1st 100 insts.	1,804,460	153,743	136,116	133,077	433,850	295,892	146,135	505,647
Total, all other sampled insts.	153,567	10,471	14,378	22,616	41,656	25,062	10,069	29,315
Estimated total non-sampled insts.	14,726	1,188	166	2,374	4,961	1,486	257	4,292

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-50. R&D expenditures in the physical sciences at universities and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

Institution and ranking	1994	1993	1992	1991	1994, by subfield			
					Astronomy	Chemistry	Physics	Other
Total, all institutions	2,171,202	2,126,838	2,052,965	1,939,587	273,606	759,370	942,486	195,740
1 Johns Hopkins U	117,188	116,033	130,059	118,842	22,799	5,323	79,841	9,225
2 MA Institute of Tech	95,154	101,256	95,935	101,286	9,970	12,879	72,305	0
3 University of Arizona	91,765	65,920	59,235	64,837	69,338	6,319	16,108	0
4 U TX Austin	64,108	64,258	58,507	59,024	8,548	14,411	16,809	24,340
5 U CA Berkeley	59,996	63,693	61,408	55,736	10,770	13,546	35,680	0
6 U MD College Park	56,381	65,431	66,810	69,447	7,631	11,666	23,643	13,441
7 California Inst of Tech	54,539	51,180	47,840	47,728	9,936	13,443	31,160	0
8 Florida State University	46,225	38,281	23,119	22,454	0	4,482	14,074	27,669
9 Cornell University	45,211	44,976	44,587	45,572	5,699	10,594	26,193	2,725
10 Stanford University	44,030	46,532	75,680	58,550	0	10,885	3,322	29,823
Total, 1st 10 insts	674,597	657,560	663,180	643,476	144,691	103,548	319,135	107,223
11 U WI Madison	39,838	36,719	35,224	32,841	6,543	11,430	15,314	6,551
12 University of IL Urbana	38,500	40,517	39,935	39,511	1,866	10,487	9,570	16,577
13 U CA San Diego	35,450	43,430	44,711	41,115	13,908	7,538	11,238	2,766
14 University of Colorado	35,005	28,968	24,521	23,171	13,026	11,679	10,129	171
15 University of Chicago	31,971	28,792	27,867	25,171	12,326	8,595	8,440	2,610
16 Harvard University	31,718e	28,041	27,740	25,868	5,256e	15,386e	11,076e	0e
17 Indiana University	29,262	29,225	29,730	24,147	1,041	9,937	18,284	0
18 Princeton University	25,463	24,071	25,628	23,478	3,730	9,231	12,502	0
19 U CA Los Angeles	24,069	24,577	25,369	22,407	1,999	10,422	11,648	0
20 Michigan State University	23,638	27,577	23,511	22,015i	0	6,117	17,521	0
Total, 1st 20 insts	989,511	969,477	967,416	923,200	204,386	204,370	444,857	135,898
21 U of Pennsylvania	23,245	19,047	18,434	18,260	197	11,744	11,304	0
22 SUNY Stony Brook	23,179	22,141	20,580	21,466	1,130	6,101	15,860	88
23 University of Michigan	22,972	30,577	23,872	21,419	706	7,479	13,715	1,072
24 Pennsylvania State U	22,486	20,733	18,737	16,158	3,524	12,854	5,127	981
25 Texas A&M University	21,890	18,015	16,905	17,230	0	10,538	9,297	2,055
26 Columbia University	21,433	18,125	16,152	16,929	2,898	8,978	2,695	6,862
27 Georgia Institute of Tech	20,390	15,761	18,392	14,422	0	6,548	13,842	0
28 University Hawaii Manoa	20,223	22,267	22,477	19,762	15,055	1,756	3,412	0
29 Ohio State University	19,834	18,645	16,772	14,618	781	10,913	8,140	0
30 U CA Santa Cruz	19,761	17,800	16,209	14,582	9,873	3,381	4,209	2,298
Total, 1st 30 insts	1,204,924	1,172,588	1,155,946	1,098,046	238,550	284,662	532,458	149,254
31 University of Washington	19,375	18,591	17,623	15,182	3,004	6,526	9,845	0
32 Yale University	19,128	19,473	19,707	18,737	1,184	6,842	11,100	2
33 Purdue University	18,772	16,730	15,814	15,134	0	9,759	9,013	0
34 Rutgers the State U NJ	17,121	19,062	20,500	18,379	0	6,525	10,596	0
35 U CA Santa Barbara	17,084	16,588	15,649	15,069	0	4,215	8,865	4,004
36 Arizona State University	16,816	16,914	15,546	15,308	209	8,821	4,198	3,588
37 U MA Amherst	15,835	15,077	16,122	--	0	8,936	5,530	1,369
38 University of Minnesota	15,802	16,735	16,190	18,143	1,210	7,585	6,990	17
39 U of Alaska Fairbanks	15,465i	14,134i	13,380	12,818	5,144i	1,264i	8,506i	551i
40 University of Virginia	14,644	13,536	12,510	11,476	1,000	6,932	6,712	0
Total, 1st 40 insts.	1,374,966	1,339,428	1,318,987	1,238,292	250,301	352,067	613,813	158,785
41 U of Iowa	14,569	16,855	20,949	18,778	1,148	3,087	10,334	0
42 U CA Irvine	14,388	15,236	14,095	13,043	45	6,433	7,095	815
43 U of Tennessee System	13,530	13,109	11,957	11,398	0	4,891	8,639	0
44 University of Rochester	13,126	14,313	13,472	12,045	885	6,865	5,376	0
45 University of Florida	12,732	12,243	10,860	10,246	931	6,479	5,318	4
46 University of Notre Dame	12,569	13,364	11,706	10,306	0	8,698	3,871	0
47 Northwestern University	12,465	11,949	11,692	11,847	0	8,202	4,254	9
48 Duke University	12,323	12,286	11,358	10,690	0	3,712	8,611	0
49 University of Pittsburgh	12,179	12,159	11,932	10,852	674	5,950	4,681	874
50 University of Oregon	12,123	12,097	11,531	11,004	0	6,611	5,512	0
Total, 1st 50 insts	1,504,970	1,473,039	1,448,539	1,358,501	253,984	412,995	677,504	160,487

See explanatory information and SOURCE at end of table

Table B-50. R&D expenditures in the physical sciences at universities and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

Institution and ranking	1994	1993	1992	1991	1994, by subfield			
					Astronomy	Chemistry	Physics	Other
51 Louisiana St U, All Camp	10,811	10,377	10,795	9,912	0	5,129	4,968	714
52 Boston University	9,701	10,463	10,394	9,359	697	1,186	7,437	381
53 Wayne State University	9,526	8,517	10,917	8,896	0	4,933	4,593	0
54 U of NC Chapel Hill	9,415	9,246	7,992	6,965	0	7,258	2,157	0
55 NC State U Raleigh	9,379	8,785	6,951	7,091	0	2,347	5,992	1,040
56 University of Utah	9,215	9,163	11,180	8,859	0	6,174	3,041	0
57 VA Polytech Inst & St U	9,187	9,249	9,403	9,562	0	6,843	2,344	0
58 University of Delaware	8,993	8,787	7,906	7,996	0	4,161	1,285	3,547
59 Rice University	8,943	8,853	9,191	9,274	2,748	3,729	2,466	0
60 University of Houston	8,755	18,860	8,291	7,944	0	5,943	2,812	0
Total, 1st 60 insts.	1,598,895	1,575,339	1,541,559	1,444,359	257,429	460,698	714,599	166,169
61 U of Missouri Columbia	8,721	7,621	5,101	5,123	0	4,665	4,056	0
62 University of Georgia	8,658	7,831	7,501	8,061	0	5,562	3,096	0
63 University of Oklahoma	8,566	7,585	6,807	5,690	0	4,861	3,705	0
64 University of Kansas	8,411	5,997	7,354	6,648	0	6,033	2,054	324
65 U CA Davis	8,361	8,859	8,670	7,471	0	3,619	4,742	0
66 University of Akron	8,325	10,021	7,289	6,357	0	1,422	234	6,669
67 SUNY Buffalo	8,108	7,067	7,503	7,432	0	5,373	2,002	733
68 Washington University	8,070	7,765	7,136	6,217	0	3,926	4,144	0
69 Vanderbilt University	8,056	7,777	6,663	6,646	0	2,034	6,022	0
70 Kent State University	8,025	8,136	8,320	4,681	0	190	1,569	6,266
Total, 1st 70 insts.	1,682,196	1,653,998	1,613,903	1,508,685	257,429	498,383	746,223	180,161
71 U of Alabama Huntsville	7,805	10,433	11,444	9,171	0	3,717	4,088	0
72 U of Central Florida	7,776	8,073	7,909	10,765	6,902	618	256	0
73 Colorado State University	7,740	8,372	6,320	5,220	0	5,035	1,889	816
74 U of South Carolina	7,646	6,346	6,390	5,282	0	5,063	2,389	194
75 Carnegie Mellon U	7,551	7,323	6,484	6,760	0	3,142	3,920	489
76 Brown University	7,492	8,330	7,964	6,907	0	3,198	4,294	0
77 University of IL Chicago	7,464	8,207	7,605	6,783	0	3,628	3,836	0
78 U of Southern California	7,014	7,843	8,200	7,349	92	4,730	2,192	0
79 Oklahoma State University	7,008	7,702	5,834	5,102	0	1,653	3,571	1,784
80 Iowa State University	6,764	5,944	4,623	8,475	0	3,654	3,110	0
Total, 1st 80 insts.	1,756,456	1,732,571	1,686,676	1,580,499	264,423	532,821	775,768	183,444
81 U of Nebraska Lincoln	6,535	7,389	7,306	5,135	7	3,924	2,604	0
82 CUNY City College	6,461	7,260	5,367	5,879	0	3,228	3,233	0
83 Rensselaer Polytech Inst	6,416	7,007	7,162	5,256	0	3,533	2,883	0
84 U CA Riverside	6,196	5,164	4,178	4,299	0	3,011	3,185	0
85 Oregon Grad Inst Sci Tech	6,171	6,128	3,707	3,726	0	3,444	2,727	0
86 Rockefeller University	6,028	6,037	7,145	9,031	0	3,882	2,146	0
87 Syracuse University	5,896	5,255	5,378	5,169	0	2,055	3,737	104
88 Utah State University	5,877	5,497	6,767	5,030	0	2,646	3,231	0
89 Washington State U	5,832	4,553	3,577	2,114	0	2,158	2,612	1,062
90 U TX Dallas	5,622	7,270	7,153	5,058	0	1,642	3,980	0
Total, 1st 90 insts	1,817,490	1,794,131	1,744,416	1,631,196	264,430	562,344	806,106	184,610
91 Emory University	5,495	6,032	6,574	5,407	0	4,608	887	0
92 Alabama A&M University	5,423	4,469	3,594	3,699	0	163	5,152	108
93 Case Western Reserve U	5,422	5,345	4,828	5,146	20	3,039	2,363	0
94 U MA Lowell	5,419	4,564	3,785	3,266	0	2,069	3,350	0
95 Clemson University	5,376	4,955	4,757	4,097	0	2,588	2,788	0
96 The University of Alabama	5,319	5,291	5,326	4,516	76	1,860	2,511	872
97 Kansas State University	5,235	4,214	3,831	3,162	0	2,049	3,186	0
98 Georgetown University	4,907	5,418	5,426	5,253	0	4,867	28	12
99 University of Cincinnati	4,736	4,535	4,991	5,879	0	3,361	1,375	0
100 Georgia State University	4,716	2,778	2,381	2,307	280	3,727	709	0
Total, 1st 100 insts	1,869,538	1,841,732	1,789,909	1,673,928	264,806	590,675	828,455	185,602
Total, all other sampled insts	275,536	285,106	263,056	265,659	6,686	152,819	106,921	9,110
Estimated total non-sampled insts	26,128	0	0	0	2,114	15,876	7,110	1,028

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-51. Federally financed R&D expenditures in the physical sciences at universities and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

Page 1 of 2

Institution and ranking	1994	1993	1992	1991	1994, by subfield			
					Astronomy	Chemistry	Physics	Other
Total, all institutions	1,565,197	1,514,179	1,476,078	1,384,201	182,503	520,178	724,031	138,485
1 Johns Hopkins U	114,099	112,799	127,434	117,022	21,109	4,913	78,852	9,225
2 MA Institute of Tech	83,188	82,262	79,456	84,110	5,377	11,739	66,072	0
3 University of Arizona	57,541	31,298	28,044	33,633	45,309	4,511	7,721	0
4 California Inst of Tech	49,691	46,825	43,122	43,033	8,761	10,345	30,585	0
5 U CA Berkeley	45,382	51,601	52,529	47,227	2,906	11,609	30,867	0
6 U TX Austin	44,574	44,189	39,288	35,841	4,801	7,974	11,306	20,493
7 Stanford University	40,075	42,174	60,441	50,320	0	9,686	3,100	27,289
8 Cornell University	40,029	39,800	36,739	35,556	4,543	9,149	24,059	2,278
9 University of IL Urbana	31,668	33,235	32,063	31,456	1,418	6,777	8,015	15,458
10 U MD College Park	30,017	32,674	34,588	35,925	4,320	5,936	12,018	7,743
Total, 1st 10 insts.	536,264	516,857	533,704	514,123	98,544	82,639	272,595	82,486
11 U CA San Diego	29,855	37,875	39,168	36,411	11,365	6,280	9,773	2,437
12 U WI Madison	29,656	27,544	26,405	24,321	4,652	8,545	12,299	4,160
13 University of Chicago	28,533	26,864	24,995	23,279	10.847	7,452	8,080	2,154
14 Harvard University	27,062	24,155	23,826	22,080	4,192	13,080	9,790	0
15 Florida State University	26,863	25,570	12,602	12,859	0	1,722	8,828	16,313
16 University of Colorado	22,999	19,559	18,533	17,886	6,578	8,450	7,830	141
17 U CA Los Angeles	20,917	22,082	22,661	20,161	1,658	9,061	10,198	0
18 Indiana University	20,065	20,709	20,388	18,712	485	7,319	12,261	0
19 U of Pennsylvania	19,301	15,687	15,519	15,434	113	9,342	9,846	0
20 Columbia University	18,702	16,822	15,540	15,341	2,608	6,956	2,615	6,523
Total, 1st 20 insts.	780,217	753,724	753,341	720,607	141,042	160,846	364,115	114,214
21 Princeton University	17,382	16,562	18,933	17,249	2,116	5,130	10,136	0
22 Yale University	17,009	16,600	16,856	16,599	783	6,027	10,199	0
23 SUNY Stony Brook	15,569	15,147	13,900	14,839	859	4,048	10,661	1
24 University of Washington	15,489	14,344	14,210	12,098	1,615	4,703	9,171	0
25 U CA Santa Barbara	15,095	14,723	13,769	13,422	0	3,663	8,031	3,401
26 University Hawaii Manoa	14,828	16,448	16,647	14,637	10,136	1,530	3,162	0
27 Ohio State University	14,305	13,179	12,590	9,217	484	8,643	5,178	0
28 Pennsylvania State U	13,994	12,749	10,991	10,095	2,802	7,995	3,100	97
29 Michigan State University	13,818	12,849	16,536	15,337 i	0	4,261	9,557	0
30 University of Michigan	13,738	13,510	13,028	13,067	658	3,865	8,977	238
Total, 1st 30 insts.	931,444	899,835	900,801	857,167	160,495	210,711	442,287	117,951
31 University of Minnesota	13,695	13,351	12,795	12,595	1,054	6,442	6,199	0
32 U CA Irvine	12,975	13,411	12,759	12,106	0	5,863	6,414	698
33 Purdue University	12,298	12,326	11,876	11,732	0	6,978	5,320	0
34 University of Rochester	12,065	12,759	12,069	11,243	627	6,253	5,185	0
35 University of Virginia	11,541	10,251	9,644	8,829	834	5,621	5,086	0
36 U of Iowa	11,327	12,534	16,512	14,983	930	2,030	8,367	0
37 Duke University	10,688	10,335	9,629	9,007	0	2,943	7,745	0
38 Arizona State University	10,651	8,779	8,651	7,056	14	5,661	3,605	1,371
39 Texas A&M University	10,613	9,358	9,494	8,616	0	4,948	4,429	1,236
40 University of Notre Dame	10,557	11,175	9,812	8,643	0	7,787	2,770	0
Total, 1st 40 insts.	1,047,854	1,014,114	1,014,042	961,977	163,954	265,237	497,407	121,256
41 University of Pittsburgh	10,263	10,490	9,792	8,527	469	4,993	3,966	835
42 Georgia Institute of Tech	10,222	8,818	10,335	8,281	0	3,283	6,939	0
43 U of Alaska Fairbanks	10,099 i	10,309 i	7,942	8,540	3,131 i	449 i	6,363 i	156 i
44 U CA Santa Cruz	9,558	8,925	7,664	6,507	2,094	2,350	3,181	1,933
45 Rutgers the State U NJ	9,161	9,496	10,687	9,458	0	5,044	4,117	0
46 Northwestern University	9,078	8,444	8,755	8,748	0	5,564	3,514	0
47 U MA Amherst	9,064	8,467	9,217	--	0	5,238	3,826	0
48 Boston University	8,545	8,540	8,634	8,253	449	1,049	6,709	338
49 University of Oregon	8,536	8,028	7,788	7,952	0	5,076	3,460	0
50 U of Tennessee System	8,385	8,073	7,499	6,284	0	3,241	5,144	0
Total, 1st 50 insts.	1,140,765	1,103,704	1,102,355	1,034,527	170,097	301,524	544,626	124,518

See explanatory information and SOURCE at end of table.

Table B-51. Federally financed R&D expenditures in the physical sciences at universities and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

Institution and ranking	1994	1993	1992	1991	1994, by subfield			
					Astronomy	Chemistry	Physics	Other
51 University of Utah	8,168	7,956	8,976	6,982	0	5,480	2,688	0
52 U CA Davis	7,291	7,468	7,367	6,500	0	3,097	4,194	0
53 Rice University	7,276	7,000	7,234	7,199	2,292	2,894	2,090	0
54 U of NC Chapel Hill	7,263	7,356	6,369	5,840	0	5,999	1,264	0
55 Vanderbilt University	6,809	6,604	5,695	5,846	0	1,674	5,135	0
56 NC State U Raleigh	6,494	5,495	3,676	3,092	0	1,690	4,804	0
57 Carnegie Mellon U	6,469	5,603	5,033	5,513	0	2,849	3,550	70
58 U of Southern California	6,418	7,196	7,570	7,168	84	4,409	1,925	0
59 University of Delaware	6,288	5,227	4,985	5,205	0	2,939	881	2,468
60 Washington University	6,139	6,137	5,985	5,195	0	2,947	3,192	0
Total, 1st 60 insts.	1,209,380	1,169,746	1,165,245	1,093,067	172,473	335,502	574,349	127,056
61 Louisiana St U, All Camp	6,011	6,028	5,495	4,758	0	2,510	3,399	102
62 CUNY City College	5,811	5,603	5,075	5,444	0	3,170	2,641	0
63 University of Florida	5,775	6,026	5,634	5,790	480	3,286	2,009	0
64 U CA Riverside	5,631	4,326	3,770	4,068	0	2,622	3,009	0
65 Colorado State University	5,558	6,593	5,398	3,960	0	3,873	1,492	193
66 U of Alabama Huntsville	5,398	8,620	9,925	7,724	0	2,433	2,965	0
67 U of South Carolina	5,351	4,559	3,634	3,438	0	3,519	1,832	0
68 SUNY Buffalo	5,114	4,326	4,580	4,332	0	3,736	1,164	214
69 University of IL Chicago	4,960	4,949	5,252	3,907	0	2,544	2,416	0
70 Alabama A&M University	4,883	3,632	3,013	3,210	0	146	4,639	98
Total, 1st 70 insts.	1,263,872	1,224,408	1,217,021	1,139,698	172,953	363,341	599,915	127,663
71 University of Houston	4,865	13,424	4,234	4,466	0	3,321	1,544	0
72 U TX Dallas	4,612	5,619	5,465	3,039	0	888	3,724	0
73 VA Polytech Inst & St U	4,448	4,402	4,176	4,480	0	2,809	1,639	0
74 Kansas State University	4,362	3,502	3,337	2,766	0	1,418	2,944	0
75 U of Nebraska Lincoln	4,303	4,418	4,142	3,189	2	2,490	1,811	0
76 Utah State University	4,261	4,273	4,926	3,033	0	1,662	2,599	0
77 Brown University	4,171	5,026	4,963	4,480	0	1,678	2,493	0
78 Emory University	4,091	4,536	5,551	4,163	0	3,441	650	0
79 Case Western Reserve U	4,077	3,870	3,367	3,735	15	2,344	1,718	0
80 Kent State University	4,001	3,821	3,291	2,521	0	147	1,144	2,710
Total, 1st 80 insts.	1,307,063	1,277,299	1,260,473	1,175,570	172,970	383,539	620,181	130,373
81 Rensselaer Polytech Inst	3,955	3,509	3,430	2,452	0	2,161	1,794	0
82 U MA Lowell	3,936	3,121	2,789	2,366	0	1,193	2,743	0
83 Hampton University	3,905	3,765	2,116	2,396	0	0	3,905	0
84 Rockefeller University	3,851	3,613	4,445	4,149	0	2,651	1,200	0
85 U Southern Mississippi	3,842	3,547	3,163	5,462	0	3,773	69	0
86 Washington State U	3,793	3,203	2,741	1,737	0	1,774	2,019	0
87 Wayne State University	3,769	3,523	3,036	1,949	0	2,470	1,299	0
88 Georgetown University	3,757	4,134	4,173	4,146	0	3,724	23	10
89 Syracuse University	3,752	3,695	3,724	3,732	0	1,673	1,987	92
90 Catholic U of America	3,728	3,513	3,223	3,639	0	689	917	2,122
Total, 1st 90 insts.	1,345,351	1,312,922	1,293,313	1,207,598	172,970	403,647	636,137	132,597
91 Iowa State University	3,706	3,367	2,333	2,797	0	1,802	1,904	0
92 Col of William & Mary	3,652	3,166	2,878	2,444	0	199	2,726	727
93 University of Oklahoma	3,634	3,101	2,366	2,100	0	1,987	1,647	0
94 Clark Atlanta University	3,437	3,271	3,115	2,588	0	2,181	1,256	0
95 U of Central Florida	3,416	2,526	2,418	1,794	3,122	111	183	0
96 U Mississippi, All Camp	3,400	3,492	4,149	4,966	0	780	2,620	0
97 Oregon Grad Inst Sci Tech	3,346	3,111	1,991	2,357	0	1,971	1,375	0
98 Northeastern University	3,337	3,213	2,802	2,484 i	0	1,265	2,072	0
99 University of Kansas	3,282	2,936	3,032	2,559	0	2,236	1,046	0
100 University of Cincinnati	3,050	2,874	3,237	3,235	0	2,039	1,011	0
Total, 1st 100 insts.	1,379,611	1,343,979	1,321,634	1,234,922	176,092	418,218	651,977	133,324
Total, all other sampled insts.	167,050	170,200	154,444	149,279	5,263	90,832	65,963	4,992
Estimated total non-sampled insts.	18,536	0	0	0	1,148	11,128	6,091	169

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-52. Total and federally financed R&D expenditures in chemistry at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

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Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
Total, all institutions	759,370	736,658	697,639	666,578	520,178	502,124	476,388	447,538
1 Harvard University	15,386e	13,442	14,103	12,384	13,080	11,600	12,387	10,972
2 U TX Austin	14,411	16,769	16,021	16,513	7,974	10,147	8,700	7,881
3 U CA Berkeley	13,546	13,566	13,835	13,906	11,609	12,023	12,008	12,210
4 California Inst of Tech	13,443	13,476	12,647	13,931	10,345	11,815	10,970	12,006
5 MA Institute of Tech	12,879	14,670	13,999	16,426	11,739	13,566	12,384	14,549
6 Pennsylvania State U	12,854	12,056	11,719	9,635	7,995	7,571	6,972	6,630
7 U of Pennsylvania	11,744	10,556	9,812	10,633	9,342	8,642	8,059	8,168
8 University of Colorado	11,679	7,820	6,895	6,863	8,450	5,780	5,494	5,422
9 U MD College Park	11,666	11,449	9,991	8,415	5,936	5,468	4,687	4,566
10 U WI Madison	11,430	10,383	9,804	8,878	8,545	7,484	6,929	5,739
Total, 1st 10 insts.	129,038	124,187	118.826	117,584	95,015	94,096	88,590	88,143
11 Ohio State University	10,913	9,768	8,289	7,137	8,643	7,494	6,300	4,844
12 Stanford University	10,885	10,551	10,846	8,882	9,686	9,018	8,414	7,452
13 Cornell University	10,594	10,091	10,550	10,825	9,149	8,538	8,852	8,365
14 Texas A&M University	10,538	8,599	7,903	8,201	4,948	4,358	4,187	4,395
15 University of IL Urbana	10,487	10,864	9,439	9,457	6,777	7,672	6,804	6,484
16 U CA Los Angeles	10,422	12,136	12,137	10,519	9,061	10,824	10,841	9,327
17 Indiana University	9,937	9,476	8,853	7,324	7,319	6,841	6,157	5,173
18 Purdue University	9,759	8,913	8,879	8,690	6,978	6,805	6,909	7,086
19 Princeton University	9,231	7,564	8,557	8,663	5,130	4,567	5,952	5,794
20 Columbia University	8,978	7,377	5,985	6,305	6,956	6,496	5,785	5,944
Total, 1st 20 insts.	230,782	219,526	210,264	203,587	169,662	166,709	158,791	153,007
21 U MA Amherst	8,936	8,795	9,583	--	5,238	4,940	5,522	--
22 Arizona State University	8,821	7,726	6,755	8,054	5,661	4,453	4,414	3,696
23 University of Notre Dame	8,698	8,831	7,274	6,170	7,787	7,985	6,582	5,599
24 University of Chicago	8,595	4,247	4,669	4,728	7,452	3,836	4,235	4,597
25 Northwestern University	8,202	7,975	7,651	7,781	5,564	5,168	5,372	5,462
26 University of Minnesota	7,585	6,851	5,952	6,160	6,442	5,666	5,062	5,004
27 U CA San Diego	7,538	7,632	9,076	8,811	6,280	6,517	7,799	7,949
28 University of Michigan	7,479	9,518	5,970	5,031	3,865	3,386	4,138	3,423
29 U of NC Chapel Hill	7,258	7,270	6,306	5,613	5,999	6,266	5,281	4,980
30 University of Virginia	6,932	5,555	5,225	5,089	5,621	4,471	4,191	4,072
Total, 1st 30 insts.	310,826	293,926	278,725	261,024	229,571	219,397	211,387	197,789
31 University of Rochester	6,865	6,924	5,871	6,067	6,253	6,395	5,402	5,650
32 VA Polytech Inst & St U	6,843	6,991	7,178	7,157	2,809	2,905	2,950	2,958
33 Yale University	6,842	8,186	7,974	7,587	6,027	7,017	6,752	6,521
34 University of Oregon	6,611	6,096	6,076	6,211	5,076	4,603	4,411	4,751
35 Georgia Institute of Tech	6,548	6,661	9,656	6,796	3,283	3,727	5,426	3,902
36 University of Washington	6,526	7,034	6,538	5,789	4,703	4,496	4,011	3,796
37 Rutgers the State U NJ	6,525	7,706	8,263	7,816	5,044	5,267	5,993	5,426
38 University of Florida	6,479	7,106	5,847	5,153	3,286	3,371	2,895	2,802
39 U CA Irvine	6,433	5,675	6,237	5,546	5,863	5,266	5,682	5,226
40 University of Arizona	6,319	6,119	6,030	5,531	4,511	4,141	3,969	3,580
Total, 1st 40 insts.	376,817	362,424	348,395	324,679	276,426	266,585	258,878	242,401
41 University of Utah	6,174	5,773	6,697	6,101	5,480	4,830	5,225	4,688
42 Michigan State University	6,117	6,409	3,526	3,302i	4,261	2,986	2,274	2,109i
43 SUNY Stony Brook	6,101	4,880	4,691	5,426	4,048	3,333	3,129	3,940
44 University of Kansas	6,033	4,208	5,254	5,059	2,236	1,951	1,877	1,788
45 University of Pittsburgh	5,950	6,123	5,876	4,826	4,993	5,266	4,959	3,958
46 University of Houston	5,943	15,420	4,320	4,360	3,321	11,706	1,895	1,815
47 University of Georgia	5,562	5,331	5,042	5,508	1,944	2,015	2,095	2,198
48 SUNY Buffalo	5,373	4,444	4,932	4,789	3,736	2,870	3,018	2,881
49 Johns Hopkins U	5,323	5,227	5,356	6,564	4,913	4,876	4,992	6,044
50 Louisiana St U, All Camp	5,129	4,260	3,959	4,555	2,510	2,426	1,855	1,729
Total, 1st 50 insts.	434,522	424,499	398,048	375,169	313,868	308,844	290,197	273,551

See explanatory information and SOURCE at end of table.

Table B-52. Total and federally financed R&D expenditures in chemistry at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

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Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
51 U of South Carolina	5,063	4,363	4,481	3,645	3,519	3,104	2,728	2,540
52 Colorado State University	5,035	5,211	5,125	4,093	3,873	4,352	4,453	3,146
53 Wayne State University	4,933	4,807	7,756	6,458	2,470	2,318	2,341	1,500
54 U of Tennessee System	4,891	4,823	4,730	4,681	3,241	3,107	3,171	2,272
55 Georgetown University	4,867	5,348	5,350	5,039	3,724	4,076	4,110	3,963
56 University of Oklahoma	4,861	4,922	4,641	3,713	1,987	2,091	1,652	1,443
57 U of Southern California	4,730	6,122	6,337	5,510	4,409	5,627	5,826	5,427
58 U of Missouri Columbia	4,665	4,139	1,844	1,754	882	960	795	838
59 Emory University	4,608	4,576	5,646	4,269	3,441	3,718	4,752	3,290
60 Florida State University	4,482	4,341	3,655	4,696	1,722	1,819	1,928	1,649
Total, 1st 60 insts.	482,657	473,151	447,613	419,027	343,136	340,016	321,953	299,619
61 North Dakota State U	4,473	4,145	2,852	6,256	1,736	1,353	1,168	919
62 U Southern Mississippi	4,402	4,130	3,325	5,812	3,773	3,503	3,119	5,435
63 U CA Santa Barbara	4,215	3,646	4,327	3,652	3,663	3,132	3,835	3,201
64 University of Delaware	4,161	4,053	3,217	3,175	2,939	2,234	1,874	1,877
65 Washington University	3,926	3,899	3,525	2,928	2,947	2,996	2,865	2,336
66 U of Nebraska Lincoln	3,924	4,198	4,698	2,592	2,490	2,576	2,931	1,952
67 Rockefeller University	3,882	3,666	5,027	7,023	2,651	2,246	3,295	3,289
68 Rice University	3,729	3,491	3,327	3,526	2,894	2,569	2,114	2,251
69 Georgia State University	3,727	1,895	1,710	1,663	1,600	1,226	1,183	985
70 U of Alabama Huntsville	3,717	5,252	5,157	4,021	2,433	4,309	4,591	3,610
Total, 1st 70 insts.	522,813	511,526	484,778	459,675	370,262	366,160	348,928	325,474
71 Duke University	3,712	3,694	3,241	3,035	2,943	2,592	2,262	1,750
72 Iowa State University	3,654	3,486	2,720	5,621	1,802	1,713	1,139	1,843
73 University of IL Chicago	3,628	3,668	3,666	4,187	2,544	1,972	2,441	2,222
74 U CA Davis	3,619	3,355	3,171	3,128	3,097	2,899	2,621	2,632
75 Rensselaer Polytech Inst	3,533	4,622	5,214	3,811	2,161	2,315	2,497	1,778
76 Oregon Grad Inst Sci Tech	3,444	3,583	2,797	2,580	1,971	2,190	1,757	2,125
77 Mississippi State U	3,396	1,951	1,816	1,938	2,831	1,518	1,073	1,301
78 U CA Santa Cruz	3,381	2,765	2,338	2,157	2,350	2,405	1,956	1,730
79 University of Cincinnati	3,361	3,505	3,747	4,004	2,039	2,153	2,402	2,241
80 Inst Paper Sci and Tech	3,310	2,404	2,129	821	1,155	743	727	177
Total, 1st 80 insts.	557,851	544,559	515,617	490,957	393,155	386,660	367,803	343,273
81 CUNY City College	3,228	3,488	2,756	2,671	3,170	3,388	2,755	2,671
82 Brown University	3,198	3,781	3,424	2,822	1,678	2,208	2,095	1,972
83 University of Idaho	3,192	1,366	1,663	1,402	1,713	652	647	464
84 Carnegie Mellon U	3,142	3,016	2,489	2,873	2,849	2,317	1,989	2,472
85 U of Iowa	3,087	2,959	3,627	3,461	2,030	1,985	2,448	2,137
86 Texas Tech University	3,077	3,176	3,226	2,451	946	1,318	1,289	852
87 Case Western Reserve U	3,039	3,043	2,856	3,077	2,344	2,236	1,821	2,135
88 Lehigh University	3,029	3,210	3,599	3,694	1,724	1,516	1,880	1,780
89 U CA Riverside	3,011	3,054	2,384	2,215	2,622	2,343	2,007	1,994
90 U Arkansas Main	3,008	3,080	2,773	2,541	1,730	1,342	1,034	1,026
Total, 1st 90 insts.	588,862	574,732	544,414	518,164	413,961	405,965	385,768	360,776
91 Boston College	2,837	2,350	2,173	2,315	2,377	2,012	1,960	2,192
92 Oregon State University	2,647	2,841	3,541	2,522	1,726	1,963	2,424	1,660
93 Utah State University	2,646	1,276	1,591	1,749	1,662	616	502	445
94 U MD Baltimore County	2,603	1,669	1,686	1,556	1,989	1,296	1,310	1,220
95 Clemson University	2,588	2,652	2,271	1,993	815	786	584	426
96 Clark Atlanta University	2,570	2,447	2,330	2,440	2,181	2,075	1,976	1,834
97 CUNY Col Staten Island	2,467	662	668	623	228	360	282	309
98 University of Connecticut	2,456	2,443	2,019	2,078	555	506	506	504
99 NC State U Raleigh	2,347	2,269	1,757	1,619	1,690	1,268	853	719
100 Virginia Commonwealth U	2,323	2,155	1,818	1,406	1,360	1,316	1,242	1,028
Total, 1st 100 insts.	614,346	595,496	564,268	536,465	428,544	418,163	397,407	371,113
Total, all other sampled insts.	129,148	141,162	133,371	130,113	80,506	83,961	78,981	76,425
Estimated total non-sampled insts.	15,876	0	0	0	11,128	0	0	0

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-53. Total and federally financed R&D expenditures in physics at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

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Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
Total, all institutions	942,486	928,677	912,926	869,999	724,031	701,733	700,219	668,510
1 Johns Hopkins U	79,841	78,624	83,658	78,983	78,852	77,277	82,834	78,617
2 MA Institute of Tech	72,305	72,908	71,814	74,892	66,072	63,646	63,294	65,982
3 U CA Berkeley	35,680	38,129	39,351	34,707	30,867	34,037	35,800	31,206
4 California Inst of Tech	31,160	26,794	25,812	24,028	30,585	25,851	24,599	22,872
5 Cornell University	26,193	26,521	26,089	26,195	24,059	24,328	22,939	22,675
6 U MD College Park	23,643	27,568	27,585	33,084	12,018	13,472	13,609	17,715
7 Indiana University	18,284	19,369	19,166	15,823	12,261	13,801	13,904	13,243
8 Michigan State University	17,521	21,168	19,985	18,713 i	9,557	9,863	14,262	13,228 i
9 U TX Austin	16,809	17,316	17,529	18,033	11,306	11,836	11,891	11,397
10 University of Arizona	16,108	15,891	14,595	16,123	7,721	8,304	7,099	7,918
Total, 1st 10 insts.	337,544	344,288	345,584	340,581	283,298	282,415	290,231	284,853
11 SUNY Stony Brook	15,860	15,620	14,186	14,600	10,661	10,772	9,741	9,969
12 U WI Madison	15,314	15,299	15,446	14,150	12,299	12,805	12,887	12,106
13 Florida State University	14,074	9,143	12,684	17,758	8,828	5,506	8,009	11,210
14 Georgia Institute of Tech	13,842	8,204	7,573	5,929	6,939	4,590	4,255	3,405
15 University of Michigan	13,715	19,166	15,988	14,541	8,977	9,138	7,853	8,758
16 Princeton University	12,502	12,522	12,441	11,468	10,136	9,672	9,973	9,341
17 U CA Los Angeles	11,648	10,930	11,780	10,752	10,198	9,915	10,562	9,836
18 U of Pennsylvania	11,304	8,266	8,548	7,538	9,846	6,921	7,417	7,215
19 U CA San Diego	11,238	11,811	12,675	12,419	9,773	10,352	11,647	11,583
20 Yale University	11,100	9,860	10,319	9,999	10,199	8,626	9,123	9,180
Total, 1st 20 insts.	468,141	465,109	467,224	459,735	381,154	370,712	381,698	377,456
21 Harvard University	11,076e	9,990	10,207	10,270	9,790	8,448	8,145	7,928
22 Rutgers the State U NJ	10,596	11,356	12,237	10,561	4,117	4,229	4,694	4,032
23 U of Iowa	10,334	12,131	14,879	13,063	8,367	9,233	12,378	11,233
24 University of Colorado	10,129	10,170	9,531	8,383	7,830	8,002	7,897	6,962
25 University of Washington	9,845	9,233	9,109	7,730	9,171	8,557	8,693	7,330
26 University of IL Urbana	9,570	11,364	11,382	11,511	8,015	9,212	9,436	9,651
27 Texas A&M University	9,297	7,505	7,853	5,533	4,429	4,389	5,117	4,089
28 Purdue University	9,013	7,817	6,935	6,444	5,320	5,521	4,967	4,646
29 U CA Santa Barbara	8,865	10,906	10,016	9,327	8,031	9,669	8,940	8,344
30 U of Tennessee System	8,639	8,286	7,227	6,717	5,144	4,966	4,328	4,012
Total, 1st 30 insts.	565,505	563,867	566,600	549,274	451,368	442,938	456,293	445,683
31 Duke University	8,611	8,592	8,117	7,655	7,745	7,743	7,367	7,257
32 U of Alaska Fairbanks	8,506 i	8,021 i	7,174	6,807	6,363 i	6,494 i	5,002	4,950
33 University of Chicago	8,440	0	0	0	8,080	0	0	0
34 Ohio State University	8,140	8,101	7,864	6,925	5,178	5,094	5,781	4,019
35 Boston University	7,437	7,904	8,339	6,946	6,709	6,551	7,179	6,309
36 U CA Irvine	7,095	8,323	7,635	7,343	6,414	7,170	6,904	6,801
37 University of Minnesota	6,990	8,450	8,888	10,625	6,199	6,662	6,812	6,890
38 University of Virginia	6,712	6,723	6,457	5,794	5,086	4,762	4,757	4,232
39 Vanderbilt University	6,022	5,788	4,761	5,099	5,135	4,884	3,992	4,747
40 NC State U Raleigh	5,992	5,635	5,194	5,013	4,804	4,227	2,823	2,373
Total, 1st 40 insts.	639,450	631,404	631,029	611,481	513,081	496,525	506,910	493,261
41 U MA Amherst	5,530	5,123	5,073	--	3,826	3,527	3,695	--
42 University of Oregon	5,512	6,001	5,455	4,793	3,460	3,425	3,377	3,201
43 University of Rochester	5,376	6,157	6,821	5,367	5,185	5,567	6,050	5,246
44 University of Florida	5,318	4,411	4,357	4,229	2,009	2,113	2,263	2,302
45 Alabama A&M University	5,152	4,245	3,413	3,517	4,639	3,450	2,862	3,050
46 Pennsylvania State U	5,127	4,765	3,639	3,225	3,100	2,823	1,998	1,722
47 Louisiana St U, All Camp	4,968	5,466	6,092	4,830	3,399	3,504	3,414	2,806
48 U CA Davis	4,742	5,504	5,499	4,343	4,194	4,569	4,746	3,868
49 University of Pittsburgh	4,681	4,582	4,768	4,692	3,966	3,913	3,727	3,586
50 Wayne State University	4,593	3,710	3,161	2,438	1,299	1,205	695	449
Total, 1st 50 insts.	690,449	681,368	679,307	648,915	548,158	530,621	539,737	519,491

See explanatory information and SOURCE at end of table.

Table B-53. Total and federally financed R&D expenditures in physics at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

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Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
51 Brown University	4,294	4,549	4,540	4,085	2,493	2,818	2,868	2,508
52 Northwestern University	4,254	3,962	3,999	4,057	3,514	3,276	3,383	3,286
53 U CA Santa Cruz	4,209	3,629	4,219	3,573	3,181	3,315	3,272	2,852
54 Arizona State University	4,198	4,784	4,662	3,021	3,605	3,181	3,335	2,235
55 Hampton University	4,156	3,275	1,898	2,267	3,905	3,275	1,898	2,267
56 Washington University	4,144	3,866	3,611	3,289	3,192	3,141	3,120	2,859
57 U of Alabama Huntsville	4,088	5,181	6,287	4,933	2,965	4,311	5,334	4,004
58 U of Missouri Columbia	4,056	3,482	3,257	3,369	537	616	610	702
59 U TX Dallas	3,980	5,860	5,902	3,522	3,724	5,051	4,892	2,393
60 Carnegie Mellon U	3,920	3,614	3,357	3,115	3,550	3,218	3,000	2,864
Total, 1st 60 insts.	731,748	723,570	721,039	684,146	578,824	562,823	571,449	545,461
61 University of Notre Dame	3,871	4,533	4,432	4,136	2,770	3,190	3,230	3,044
62 University of IL Chicago	3,836	4,539	3,939	2,596	2,416	2,977	2,811	1,685
63 Syracuse University	3,737	3,182	2,971	2,819	1,987	2,160	2,280	2,197
64 University of Oklahoma	3,705	2,663	2,166	1,977	1,647	1,010	714	657
65 Oklahoma State University	3,571	4,019	3,560	3,441	957	961	920	822
66 University Hawaii Manoa	3,412	2,931	2,491	1,858	3,162	2,606	2,226	1,795
67 U MA Lowell	3,350	2,854	2,150	1,872	2,743	2,155	1,853	1,537
68 U Mississippi, All Camp	3,347	3,751	4,432	5,281	2,620	2,821	3,576	4,379
69 Stanford University	3,322	3,853	5,089	4,374	3,100	3,523	4,138	3,833
70 CUNY City College	3,233	3,772	2,611	3,208	2,641	2,215	2,320	2,773
Total, 1st 70 insts.	767,132	759,667	754,880	715,708	602,867	586,441	595,517	568,183
71 Utah State University	3,231	4,221	5,176	3,281	2,599	3,657	4,424	2,588
72 Kansas State University	3,186	2,590	2,302	1,760	2,944	2,354	2,078	1,616
73 U CA Riverside	3,185	2,110	1,794	2,084	3,009	1,983	1,763	2,074
74 University of New Mexico	3,135	2,815	2,348	1,805	1,697	1,873	1,232	1,200
75 U TX MD Anderson Cncr	3,112	2,824	3,772	4,183	2,410	2,080	1,853	1,966
76 Iowa State University	3,110	2,389	1,834	2,785	1,904	1,654	1,194	954
77 University of Georgia	3,096	2,500	2,459	2,553	1,045	932	955	986
78 University of Utah	3,041	3,390	4,483	2,758	2,688	3,126	3,751	2,294
79 Rensselaer Polytech Inst	2,883	2,385	1,948	1,445	1,794	1,194	933	674
80 University of Houston	2,812	3,440	3,971	3,458	1,544	1,718	2,339	2,622
Total, 1st 80 insts.	797,923	788,331	784,967	741,820	624,501	607,012	616,039	585,157
81 Clemson University	2,788	2,303	2,486	2,104	879	683	1,142	691
82 Col of William & Mary	2,788	2,879	2,784	2,815	2,726	2,491	2,274	2,147
83 Oregon Grad Inst Sci Tech	2,727	2,545	910	1,146	1,375	921	234	232
84 Columbia University	2,695	1,869	1,411	1,759	2,615	1,864	1,411	1,759
85 Washington State U	2,612	2,056	1,281	1,037	2,019	1,465	954	816
86 U of Nebraska Lincoln	2,604	2,944	2,475	2,464	1,811	1,645	1,093	1,179
87 The University of Alabama	2,511	2,482	2,850	2,192	1,023	819	887	585
88 Rice University	2,466	2,572	2,800	2,950	2,090	1,934	2,288	2,395
89 South Carolina State Col	2,442 i	1,643 i	1,590 i	1,217 i	0 i	0 i	0 i	0 i
90 U of South Carolina	2,389	1,724	1,906	1,610	1,832	1,455	906	898
Total, 1st 90 insts.	823,945	811,348	805,460	761,114	640,871	620,289	627,228	595,859
91 Howard University	2,373	1,332	717	555	2,277	1,300	679	462
92 Case Western Reserve U	2,363	2,177	1,816	1,919	1,718	1,526	1,407	1,470
93 VA Polytech Inst & St U	2,344	2,258	2,049	2,344	1,639	1,497	1,226	1,522
94 Florida A&M University	2,261	1,404 i	1,383	795	2,132	1,372 i	1,353	677
95 SUNY Albany	2,220	1,101	1,207	1,248	564	532	533	670
96 U of Southern California	2,192	1,618	1,797	1,754	1,925	1,486	1,697	1,677
97 U of NC Chapel Hill	2,157	1,976	1,686	1,352	1,264	1,090	1,088	860
98 Rockefeller University	2,146	2,371	2,118	2,008	1,200	1,367	1,150	860
99 Northeastern University	2,102	2,339	1,950	3,076	2,072	2,284	1,812	2,220 i
100 University of Kansas	2,054	1,789	1,509	1,412	1,046	985	770	771
Total, 1st 100 insts.	846,157	829,713	821,692	777,577	656,708	633,728	638,943	607,048
Total, all other sampled insts.	89,219	98,964	91,234	92,422	61,232	68,005	61,276	61,462
Estimated total non-sampled insts.	7,110	0	0	0	6,091	0	0	0

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

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Table B-54. R&D expenditures in the environmental sciences at universities and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1994, by subfield: Atmos-pheric	Earth sciences	Ocean-ography	Other
Total, all institutions	1,425,973	1,320,402	1,239,486	1,116,369	219,920	458,123	458,595	289,335
1 U CA San Diego	102,266	78,807	73,193	70,038	0	37,050	65,216	0
2 Texas A&M University	80,878	74,688	65,732	69,272	2,683	3,556	50,921	23,718
3 Woods Hole Oceanograph	63,974	64,520	69,716	64,814 i	4,516 i	21,672 i	16,488 i	21,298 i
4 University of Washington	57,912	55,031	59,379	22,771	6,106	5,983	45,749	74
5 Johns Hopkins U	40,593	43,880	41,082	39,546	9,986 i	2,543 i	16,026 i	12,038 i
6 Columbia University	39,786	28,472	27,480	29,777	0	0	0	39,786
7 University of Colorado	36,036	32,086	28,725	25,508	18,331	14,319	1,547	1,839
8 U of Alaska Fairbanks	35,838 i	32,623 i	31,109	31,485	1,518 i	14,482 i	19,721 i	117 i
9 VA Polytech Inst & St U	32,781	20,434	11,891	6,294	0	7,554	0	25,227
10 University of IL Urbana	27,052	27,791	26,970	25,670	1,707	21,876	0	3,469
Total, 1st 10 insts	517,116	458,332	435,277	385,175	44,847	129,035	215,668	127,566
11 U TX Austin	25,826	27,457	28,888	28,919	0	16,183	9,643	0
12 Oregon State University	25,740	25,240	24,122	21,144	87	1,156	24,494	3
13 University of Miami	25,528	22,848	19,840	19,149	13,899	79	9,581	1,969
14 U of New Hampshire	23,016	20,840	18,339	15,375	8,760	1,559	759	11,938
15 U of Rhode Island	22,534 i	22,227 i	18,439 i	17,442	2,006 i	218 i	20,310 i	0 i
16 U WI Madison	21,898	24,004	21,726	21,194	12,604	2,787	2,683	3,824
17 Pennsylvania State U	21,360	18,477	17,918	15,536	5,531	13,329	0	2,500
18 University of Arizona	20,861	20,633	20,308	16,176	2,561	4,803	0	13,497
19 University of Michigan	20,823	23,999	20,533	17,742	9,761	5,227	2,510	3,325
20 Louisiana St U, All Camp	20,537	19,076	17,877	16,303	0	3,921	14,381	2,235
Total, 1st 20 insts.	745,239	683,133	643,267	574,155	100,056	178,297	300,029	166,857
21 U MD Center for EES	19,817	19,055	18,557	16,205	0	0	18,558	1,259
22 MA Institute of Tech	16,094	14,666	13,069	12,580	321	13,359	2,414	0
23 SUNY Stony Brook	15,931	15,463	11,799	11,140	2,063	4,320	9,548	0
24 Utah State University	14,912	13,544	10,643	11,813	10,100	4,812	0	0
25 California Inst of Tech	14,850	12,870	13,114	16,627	0	14,159	0	691
26 U CA Los Angeles	14,130	14,196	13,151	13,813	3,218	10,912	0	0
27 Desert Research Institute	14,122	14,680	15,397	14,043	3,163	5,993	0	4,966
28 Col of William & Mary	13,723	14,944	13,018	12,784	0	0	13,723	0
29 U of South Carolina	13,591	12,276	11,835	9,786	0	11,611	1,980	0
30 U of Tennessee System	13,069	13,801	11,993	9,817	22	1,544	0	11,503
Total, 1st 30 insts.	895,478	828,628	775,843	702,763	118,943	245,007	346,252	185,276
31 University of Oklahoma	12,655	11,921	9,192	11,009	7,883	4,772	0	0
32 Florida State University	11,752	10,178	10,288	11,948	5,611	2,025	3,170	946
33 U of Southern California	11,591	14,596	12,736	7,798	0	6,586	2,828	2,177
34 University of Minnesota	11,560	13,185	11,830	12,053	0	5,624	0	5,936
35 Colorado State University	11,432	11,427	16,885	9,520	10,114	1,318	0	0
36 U of NC Chapel Hill	11,413	9,893	7,989	6,937	0	7,559	3,854	0
37 U of Nevada Las Vegas	10,123	11,234	6,243	5,387	0	847	0	9,276
38 Rutgers the State U NJ	9,898	8,434	8,507	7,909	474	616	4,447	4,361
39 U CA Santa Barbara	9,789	10,085	10,488	10,014	0	2,353	7,410	26
40 Harvard University	9,714e	9,054	9,839	7,499	0e	9,714e	0e	0e
Total, 1st 40 insts.	1,005,405	938,635	879,840	792,837	143,025	286,421	367,961	207,998
41 NC State U Raleigh	9,651	8,945	6,503	6,584	0	0	5,012	4,639
42 New Mexico State U	9,585	10,719	8,631	3,069	8,598	554	0	433
43 Georgia Institute of Tech	9,459	7,640	7,128	5,519	624	8,685	0	150
44 U CA Santa Cruz	9,443	7,805	9,856	6,836	0	2,737	6,616	90
45 U MD College Park	8,932	12,858	10,558	8,232	6,784	2,065	0	83
46 U of Central Florida	8,909	8,225	7,107	7,307	8,909	0	0	0
47 U of South Florida	8,835	6,772	7,867	6,305	0	849	7,986	0
48 University of Georgia	8,426	7,187	6,252	6,625	0	3,633	4,793	0
49 Princeton University	8,190	8,083	7,150	6,974	3,652	4,538	0	0
50 University Hawaii Manoa	8,141	10,262	17,406	20,168	0	5,043	1,490	1,608
Total, 1st 50 insts.	1,094,976	1,027,131	968,298	870,456	171,592	314,525	393,858	215,001

See explanatory information and SOURCE at end of table.

Table B-54. R&D expenditures in the environmental sciences at universities and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

Institution and ranking	1994	1993	1992	1991	1994, by subfield			
					Atmospheric	Earth sciences	Oceanography	Other
51 University of Kansas	7,742	8,026	7,812	6,759	0	7,579	0	163
52 NJ Inst of Technology	7,683	8,007	8,396	5,548	0	0	0	7,683
53 Ohio State University	7,644	6,756	6,728	7,210	0	3,951	0	3,693
54 University of Wyoming	7,624	7,855	5,742	3,460	2,117	2,999	0	2,508
55 University of Connecticut	7,614	7,387	7,300	8,114	0	357	7,257	0
56 West Virginia University	7,320	6,571	5,386	5,273	0	715	0	6,605
57 University of Delaware	7,154	7,034	7,746	6,563	0	761	6,393	0
58 U of Maine	6,920	4,712	4,448	5,107	0	3,468	3,452	0
59 SUNY Albany	6,776	7,274	6,255	7,556	6,428	348	0	0
60 University of Virginia	6,653	6,611	6,192	4,827	4,389	0	1,846	418
Total, 1st 60 insts.	1,168,106	1,097,364	1,034,303	930,873	184,526	334,703	412,806	236,071
61 U MA Amherst	6,386	6,383	6,158	--	0	4,715	0	1,671
62 Stanford University	6,192	5,761	6,882	5,598	0	4,549	1,643	0
63 Brown University	5,202	4,858	5,106	5,241	0	0	0	5,202
64 U of Nebraska Lincoln	5,151	4,186	6,941	5,657	3,113	2,038	0	0
65 Old Dominion University	5,061	5,173	3,424	1,642	0	149	1,632	3,280
66 University of Florida	4,961	1,706	5,493	5,270	0	1,196	2,697	1,068
67 U of Alabama Huntsville	4,875	2,819	2,644	923	4,875	0	0	0
68 University of Utah	4,870	3,672	4,229	3,659	2,143	2,727	0	0
69 U CA Berkeley	4,466	4,888	5,259	3,619	0	4,361	0	105
70 Cornell University	4,389	5,359	5,106	6,496	0	3,261	0	1,128
Total, 1st 70 insts.	1,219,659	1,142,169	1,085,545	968,978	194,657	357,699	418,778	248,525
71 U MD Biotechnology Inst	4,355	--	--	--	0	0	4,355	0
72 US Naval Postgrad School	4,157	3,916	3,231	3,426	1,952	0	2,205	0
73 U of Nevada Reno	4,089	5,181	4,699	4,132	3,523	275	10	281
74 NM Inst Mining & Tech	3,845	4,606	5,891	5,235 i	0	3,168	0	677
75 University of Chicago	3,791	3,106	3,156	3,752	0	3,791	0	0
76 Rice University	3,671	2,794	2,878	2,685	0	1,306	0	2,365
77 Oregon Grad Inst Sci Tech	3,631	3,590	2,687	2,598	887	0	0	2,744
78 Mississippi State U	3,587	2,833	1,043	1,427	0	1,027	0	2,560
79 Washington University	3,505	3,439	2,274	1,987	0	3,505	0	0
80 Arizona State University	3,446	3,836	8,830	5,376	0	3,428	0	18
Total, 1st 80 insts.	1,257,736	1,175,470	1,120,234	999,596	201,019	374,199	425,348	257,170
81 Duke University	3,300	4,024	3,492	2,797	0	1,084	2,216	0
82 U CA Riverside	3,162	1,673	1,344	1,413	0	3,162	0	0
83 U PR Mayaguez	3,062	2,765	967 i	1,196 i	0	420	2,467	175
84 U WI Milwaukee	2,987	2,720	3,075	2,741	0	497	2,470	20
85 Memphis State University	2,738	2,773	2,741	3,047	0	2,738	0	0
86 University of Idaho	2,675	2,794	2,588	1,961	0	1,116	0	1,559
87 Tarleton State University	2,661	2,766	1,334	845	0	2,630	0	31
88 SD Sch of Mines & Tech	2,622	2,331	2,007	1,620	2,622	0	0	0
89 Indiana University	2,350	2,167	1,666	765	0	2,350	0	0
90 Southern Methodist U	2,312	2,223	2,874	3,991	0	2,312	0	0
Total, 1st 90 insts.	1,285,605	1,201,706	1,142,322	1,019,972	203,641	390,508	432,501	258,955
91 Yale University	2,299	2,314	2,309	2,359	821	1,324	96	58
92 University of New Mexico	2,267	1,987	1,499	1,665	447	1,806	0	14
93 SUNY Col Env Sci Frstry	2,239	2,187	1,846	1,864	1,223	177	401	438
94 U TX Dallas	2,185	1,056	1,403	1,424	0	2,185	0	0
95 Purdue University	2,081	2,221	2,155	2,202	1,353	728	0	0
96 U MA Boston	2,006	1,573	991	--	0	2	1,590	414
97 U Arkansas Main	1,915	1,188	1,111	792	0	1,139	0	776
98 Western Illinois U	1,892	2,035 i	1,525 i	1,186 i	115	694	833	250
99 Oklahoma State University	1,890	1,360	1,418	1,563	0	1,183	0	707
100 University of North Texas	1,812	1,283	1,440	1,674	0	0	0	1,812
Total, 1st 100 insts.	1,306,191	1,218,910	1,158,019	1,034,701	207,600	399,746	435,421	263,424
Total, all other sampled insts.	80,823	101,492	81,467	81,668	7,219	41,406	7,473	24,725
Estimated total non-sampled insts.	38,959	0	0	0	5,101	16,971	15,701	1,186

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-55. Federally financed R&D expenditures in the environmental sciences at universities and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

Page 1 of 2

Institution and ranking	1994	1993	1992	1991	1994, by subfield			
					Atmospheric	Earth sciences	Oceanography	Other
Total, all institutions	949,005	870,538	790,143	699,155	164,030	267,457	325,415	192,103
1 U CA San Diego	81,240	57,152	50,757	47,954	0	29,327	51,913	0
2 Texas A&M University	62,565	57,072	48,909	47,120	2,173	763	41,394	18,235
3 Woods Hole Oceanograph	58,138	57,698	61,785	56,693 i	3,954 i	20,359 i	14,771 i	19,054 i
4 University of Washington	55,009	50,789	56,500	21,133	5,801	5,355	43,781	72
5 Johns Hopkins U	39,196	42,196	38,508	36,233	9,981 i	2,172 i	16,023 i	11,020 i
6 Columbia University	38,467	28,197	27,068	29,006	0	0	0	38,467
7 VA Polytech Inst & St U	28,812	16,147	6,130	3,487	0	3,585	0	25,227
8 University of Colorado	26,785	24,097	22,201	20,470	14,374	10,408	617	1,386
9 U of Alaska Fairbanks	22,985 i	23,461 i	18,077	19,382	1,518 i	10,904 i	10,514 i	49 i
10 University of Miami	22,716	20,158	17,628	16,288	12,635	58	8,406	1,617
Total, 1st 10 insts	435,913	376,967	347,563	297,766	50,436	82,931	187,419	115,127
11 Oregon State University	21,983	20,603	20,183	17,962	86	781	21,116	0
12 U of Rhode Island	19,574 i	19,326 i	15,098 i	14,209	1,748 i	131 i	17,695 i	0 i
13 University of Michigan	15,770	16,624	14,600	12,631	8,654	3,330	1,693	2,093
14 U of New Hampshire	15,716	14,041	13,077	11,745	6,817	1,306	414	7,179
15 U WI Madison	15,148	16,554	14,470	14,109	11,006	1,635	594	1,913
16 California Inst of Tech	13,481	12,123	12,154	15,811	0	13,315	0	166
17 MA Institute of Tech	12,353	11,829	10,704	10,160	247	10,253	1,853	0
18 Pennsylvania State U	11,742	10,287	8,774	7,245	4,116	7,245	0	381
19 U TX Austin	9,932	11,820	12,048	10,558	0	5,819	4,113	0
20 SUNY Stony Brook	9,836	8,830	7,197	6,816	1,525	3,032	5,279	0
Total, 1st 20 insts	581,448	519,004	475,868	419,012	84,635	129,778	240,176	126,859
21 Desert Research Institute	9,599	10,539	8,219	7,337	2,256	4,866	0	2,477
22 U CA Los Angeles	9,337	9,457	8,923	9,763	2,817	6,520	0	0
23 Colorado State University	8,959	10,608	8,159	8,082	7,991	968	0	0
24 U of Southern California	8,749	10,738	9,939	6,294	0	5,406	2,341	1,002
25 U of Tennessee System	8,682	10,232	8,595	6,357	18	998	0	7,666
26 New Mexico State U	8,262	9,360	7,370	2,200	7,954	206	0	102
27 University of IL Urbana	8,227	8,295	6,152	5,712	1,437	5,478	0	1,312
28 University of Arizona	7,815	7,266	6,695	4,964	793	2,511	0	4,511
29 Louisiana St U, All Camp	7,308	7,085	7,099	5,829	0	1,083	5,796	429
30 U CA Santa Barbara	6,959	7,145	7,290	7,036	0	1,634	5,325	0
Total, 1st 30 insts	665,345	609,729	554,309	482,586	107,901	159,448	253,638	144,358
31 Harvard University	6,754	6,631	7,640	6,273	0	6,754	0	0
32 U of NC Chapel Hill	6,654	5,649	3,750	3,123	0	4,966	1,688	0
33 U CA Santa Cruz	6,005	5,496	5,551	4,089	0	1,980	4,001	24
34 Florida State University	5,946	6,731	7,438	7,714	3,453	341	1,952	200
35 West Virginia University	5,896	4,956	3,478	3,713	0	471	0	5,425
36 Col of William & Mary	5,831	5,998	4,428	3,788	0	0	5,831	0
37 Utah State University	5,541	8,242	4,470	5,607	4,357	1,184	0	0
38 U MD College Park	5,511	7,076	5,728	5,064	4,335	1,117	0	59
39 University of Virginia	5,493	5,474	4,940	4,208	3,664	0	1,829	0
40 U of South Florida	5,476	3,525	3,352	2,961	0	325	5,151	0
Total, 1st 40 insts.	724,452	669,507	605,084	529,126	123,710	176,586	274,090	150,066
41 U MD Center for EES	5,452	5,413	4,321	2,857	0	0	5,268	184
42 University Hawaii Manoa	5,169	7,330	14,473	15,095	0	3,884	1,088	197
43 Stanford University	5,085	4,745	4,052	2,888	0	3,512	1,573	0
44 University of Delaware	4,927	4,939	4,994	4,185	0	482	4,445	0
45 Ohio State University	4,860	4,378	4,469	4,056	0	2,151	0	2,709
46 Princeton University	4,837	4,782	4,526	4,404	3,139	1,698	0	0
47 University of Minnesota	4,745	4,508	4,080	2,568	0	2,715	0	2,030
48 Georgia Institute of Tech	4,742	4,274	4,006	3,169	313	4,354	0	75
49 University of Oklahoma	4,702	4,348	2,807	2,427	3,545	1,157	0	0
50 NC State U Raleigh	4,638	4,537	3,124	3,276	0	0	1,651	2,987
Total, 1st 50 insts.	773,609	718,761	655,936	574,051	130,707	196,539	288,115	158,248

See explanatory information and SOURCE at end of table.

Table B-55. Federally financed R&D expenditures in the environmental sciences at universities and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1994, by subfield: Atmos-pheric	Earth sciences	Ocean-ography	Other
51 U of Nevada Las Vegas	4,344	6,973	5,587	4,731	0	150	0	4,194
52 Brown University	4,275	3,976	4,183	4,204	0	0	0	4,275
53 U of Maine	4,223	2,490	2,356	3,606	0	1,464	2,759	0
54 Rutgers the State U NJ	4,110	2,323	2,509	945	238	432	3,012	428
55 US Naval Postgrad School	4,061	3,757	3,217	3,423	1,891	0	2,170	0
56 U of Alabama Huntsville	3,958	2,144	2,230	629	3,958	0	0	0
57 University of Connecticut	3,771	3,803	4,093	4,762	0	261	3,510	0
58 U of Nevada Reno	3,659	3,300	2,432	2,044	3,440	8	0	211
59 University of Wyoming	3,638	3,657	2,597	1,798	1,803	1,290	0	545
60 University of Chicago	3,548	2,959	2,201	2,309	0	3,548	0	0
Total, 1st 60 insts.	813,196	754,143	687,341	602,502	142,037	203,692	299,566	167,901
61 University of Utah	3,514	2,693	2,592	2,154	2,062	1,452	0	0
62 SUNY Albany	3,467	3,966	3,302	3,136	3,281	186	0	0
63 U of South Carolina	3,456	4,040	3,842	2,962	0	2,512	944	0
64 Arizona State University	3,158	3,500	8,403	4,922	0	3,146	0	12
65 Mississippi State U	3,050	2,387	602	699	0	965	0	2,085
66 U CA Berkeley	2,861	2,978	3,376	2,334	0	2,855	0	6
67 Rice University	2,759	1,497	1,920	1,683	0	1,136	0	1,623
68 U MD Biotechnology Inst	2,554	--	--	--	0	0	2,554	0
69 NJ Inst of Technology	2,535	1,696	2,038	1,295	0	0	0	2,535
70 Washington University	2,532	1,971	1,618	1,390	0	2,532	0	0
Total, 1st 70 insts.	843,082	778,871	715,034	623,077	147,380	218,476	303,064	174,162
71 Duke University	2,435	2,837	2,296	1,883	0	989	1,446	0
72 Cornell University	2,407	3,648	3,054	3,824	0	2,176	0	231
73 U PR Mayaguez	2,217	1,454	796 i	1,024 i	0	368	1,715	134
74 U CA Riverside	2,178	944	639	758	0	2,178	0	0
75 SD Sch of Mines & Tech	2,142	1,915	1,707	1,375	2,142	0	0	0
76 Southern Methodist U	2,138	2,038	2,482	3,886	0	2,138	0	0
77 U MA Amherst	2,102	2,092	2,091	--	0	1,748	0	354
78 University of Georgia	2,063	1,854	1,342	1,652	0	605	1,458	0
79 Yale University	1,878	1,762	1,732	1,648	677	1,089	75	37
80 U of Nebraska Lincoln	1,702	1,361	1,483	1,771	1,140	562	0	0
Total, 1st 80 insts.	864,344	798,776	732,656	640,898	151,339	230,329	307,758	174,918
81 University of Florida	1,648	714	2,205	1,915	0	390	1,178	80
82 Meharry Medical College	1,561	428	0	0	0	0	0	1,561
83 University of New Mexico	1,560	1,258	895	937	363	1,183	0	14
84 Purdue University	1,460	1,480	1,467	1,546	949	511	0	0
85 Drexel University	1,448	789	606	584	1,448	0	0	0
86 Oregon Grad Inst Sci Tech	1,425	1,655	1,273	1,251	600	0	0	825
87 U WI Superior	1,411	1,338	1,243	1,402	0	0	26	1,385
88 Wentworth Inst of Tech	1,405	1,634	1,287	1,460	1,405	0	0	0
89 Portland State University	1,346	1,128	157	186	158	24	1,164	0
90 U WI Milwaukee	1,260	1,016	1,196	1,054	0	278	982	0
Total, 1st 90 insts.	878,868	810,216	742,985	651,233	156,262	232,715	311,108	178,783
91 NM Inst Mining & Tech	1,185	1,063	2,140	2,041 i	0	1,185	0	0
92 Indiana University	1,106	1,287	806	454	0	1,106	0	0
93 U CA Davis	1,106	1,287	858	732	0	1,106	0	0
94 University North Dakota	1,097	1,179	1,086	2,153	925	123	0	49
95 U TX El Paso	1,087	895	705	431	0	893	0	194
96 University of Oregon	1,047	951	2,137	2,209	0	817	230	0
97 Western Illinois U	1,004	1,281 i	1,003 i	761 i	73	288	613	30
98 Syracuse University	988	545	632	656	0	972	0	16
99 Old Dominion University	984	809	840	1,267	0	87	854	43
100 Memphis State University	978	766	730	688	0	978	0	0
Total, 1st 100 insts.	889,450	820,279	753,922	662,625	157,260	240,270	312,805	179,115
Total, all other sampled insts.	38,546	50,259	36,221	36,530	2,443	20,179	3,149	12,775
Estimated total non-sampled insts.	21,009	0	0	0	4,327	7,008	9,461	213

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-56. Total and federally financed R&D expenditures in the mathematical sciences at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

Page 1 of 2

Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
Total, all institutions	278,543	272,031	247,511	230,095	205,634	202,917	183,062	170,485
1 Johns Hopkins U	37,323	34,459	27,603	29,877	37,292	34,431	27,576	29,800
2 Rutgers the State U NJ	7,033	7,482	9,035	8,993	3,354	3,989	5,393	5,182
3 University of Minnesota	6,110	5,865	5,392	5,731	5,488	5,280	4,542	4,525
4 George Washington U	6,032	6,856	5,955	5,898	5,449	6,548	5,712	5,590
5 U of South Carolina	5,849	3,528	1,270	813	4,664	2,601	683	607
6 U MD College Park	5,809	5,294	4,578	2,569	1,408	1,508	1,250	1,611
7 Boston College	5,333	6,135	5,968	5,188	3,792	4,519	4,896	4,497
8 Princeton University	5,254	5,205	4,462	4,344	4,411	4,228	3,693	3,556
9 Iowa State University	4,899	5,083	4,743	4,547	1,668	1,701	1,785	1,594
10 New York University	4,735	3,143	3,053	3,528	3,571	2,825	2,701	3,239
Total, 1st 10 insts.	88,377	83,050	72,059	71,488	71,097	67,630	58,231	60,201
11 Brown University	4,665	4,582	4,905	3,617	3,109	3,136	3,487	2,820
12 MA Institute of Tech	4,625	6,681	3,253	2,346	4,152	5,978	2,720	2,150
13 SUNY Stony Brook	4,442	3,825	3,458	2,566	2,816	2,372	2,351	1,743
14 NC State U Raleigh	4,391	3,884	4,026	3,956	1,901	1,519	1,193	1,305
15 US Naval Postgrad School	4,072	3,702	2,042	609	4,072	3,692	2,028	577
16 U CA Berkeley	3,849	5,299	4,760	4,804	3,624	4,992	4,518	4,568
17 U CA Los Angeles	3,652	3,675	3,814	3,732	3,428	3,475	3,718	3,568
18 Cornell University	3,537	3,599	4,192	5,903	2,830	3,166	3,607	4,509
19 Purdue University	3,498	3,252	3,145	2,544	2,050	2,083	1,748	1,868
20 U WI Madison	3,398	3,476	3,433	3,683	2,298	2,385	2,239	2,446
Total, 1st 20 insts.	128,506	125,025	109,087	105,248	101,377	100,428	85,840	85,755
21 Carnegie Mellon U	2,923	2,861	2,917	1,822	2,416	2,147	2,339	1,560
22 Georgia Institute of Tech	2,910	3,245	2,162	2,244	1,459	1,816	1,215	1,288
23 Stanford University	2,906	3,287	3,504	2,955	2,752	3,072	2,783	2,488
24 Texas A&M University	2,852	1,370	1,046	1,252	2,140	1,093	895	1,140
25 University of Arizona	2,836	2,084	2,313	2,259	2,021	1,525	1,642	1,764
26 University of Washington	2,641	2,575	6,882	6,383	2,338	2,319	6,554	5,910
27 Ohio State University	2,606	3,083	2,479	2,114	2,057	2,416	1,801	1,515
28 University of Montana	2,601	1,817	485	170	2,270	1,562	430	116
29 University of Florida	2,596	2,763	2,088	1,892	1,783	1,943	1,447	1,405
30 University of Michigan	2,586	2,187	3,008	3,192	1,842	2,177	1,909	1,976
Total, 1st 30 insts.	155,963	150,297	135,971	129,531	122,455	120,498	106,855	104,917
31 University of Georgia	2,552	2,301	2,207	2,163	407	342	323	247
32 University of IL Chicago	2,481	2,415	2,969	1,959	1,833	1,827	1,723	1,366
33 VA Polytech Inst & St U	2,467	1,675	1,942	1,884	1,344	774	903	906
34 Harvard University	2,418e	2,130	2,338	2,398	2,170	2,035	2,291	2,262
35 Michigan State University	2,411	2,630	538	504i	1,676	1,225	427	396i
36 Boston University	2,406	2,798	2,490	1,331	2,374	2,774	2,464	1,331
37 Pennsylvania State U	2,270	2,806	2,377	2,462	1,625	1,855	1,761	1,649
38 Rice University	2,227	2,337	2,049	1,508	1,821	1,841	1,962	1,482
39 University of Chicago	2,204	2,092	1,946	1,872	2,114	1,993	1,769	1,652
40 U MA Amherst	2,140	2,275	1,951	--	1,702	1,759	1,495	--
Total, 1st 40 insts.	179,539	173,756	156,778	145,612	139,521	136,923	121,973	116,208
41 U TX MD Anderson Cncr	2,096	2,653	2,476	2,483	434	1,013	1,078	1,012
42 U CA San Diego	1,960	1,819	1,897	1,631	1,910	1,769	1,848	1,509
43 Loyola U of Chicago	1,950	959	1,087	431	1,490	824	1,023	431
44 Clemson University	1,936	2,434	1,969	1,729	610	721	789	449
45 University of Colorado	1,921	1,601	1,354	1,198	1,496	1,343	1,240	1,110
46 Yale University	1,909	1,908	1,649	1,926	1,739	1,560	1,461	1,785
47 U TX Austin	1,903	1,196	1,258	1,185	1,110	791	910	789
48 Western Michigan U	1,767	889	224	182	1,177	617	130	67
49 U of Southern California	1,651	2,139	2,224	1,444	1,477	2,012	2,095	1,393
50 Indiana University	1,544	1,842	1,262	1,255	839	1,119	742	698
Total, 1st 50 insts.	198,176	191,196	172,178	159,076	151,803	148,692	133,289	125,451

See explanatory information and SOURCE at end of table.

Table B-56. Total and federally financed R&D expenditures in the mathematical sciences at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

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Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
51 University of Utah	1,539	1,321	1,570	1,191	1,426	1,302	1,354	1,064
52 U of Pennsylvania	1,537	1,253	1,122	900	1,289	1,166	1,107	811
53 University of IL Urbana	1,509	1,816	1,688	2,422	916	1,163	1,112	1,651
54 U of NC Chapel Hill	1,435	991	1,479	1,600	1,398	929	1,241	1,424
55 University of Virginia	1,323	1,390	1,477	1,506	1,094	1,033	1,173	1,243
56 Washington University	1,238	1,109	1,374	1,090	1,100	1,027	1,247	991
57 U of Tennessee System	1,230	966	1,011	829	790	638	552	349
58 Oregon State University	1,192	1,487	1,484	1,064	780	1,060	1,106	731
59 Rensselaer Polytech Inst	1,188	1,334	1,521	1,256	723	668	729	586
60 Louisiana St U, All Camp	1,181	1,171	1,420	2,081	182	199	386	475
Total, 1st 60 insts.	211,548	204,034	186,324	173,015	161,501	157,877	143,296	134,776
61 U CA Santa Barbara	1,166	1,409	1,118	882	773	816	679	455
62 U of Alabama Huntsville	1,152	1,160	828	1,456	692	734	464	1,002
63 University of Connecticut	1,128	1,056	1,495	747	541	526	460	477
64 Florida State University	1,012	1,122	1,528	2,160	650	923	1,261	1,299
65 George Mason University	991	1,241	873	937	831	1,085	873	522
66 Illinois State University	989	428	32	23	906	369	0	6
67 U CA Riverside	970	1,017	762	664	561	568	421	349
68 California Inst of Tech	948	840	853	926	933	830	841	915
69 Colorado State University	946	970	748	503	377	401	615	336
70 Dartmouth College	943	1,115	789	749	699	886	685	541
Total, 1st 70 insts.	221,793	214,392	195,350	182,062	168,464	165,015	149,595	140,678
71 Clark Atlanta University	936	883	841	0	862	814	775	0
72 University of Houston	925	1,725	655	677	626	1,254	393	419
73 Air Force Inst of Tech	898	122	284	9	147	122	284	9
74 Duke University	868	992	846	636	801	899	761	530
75 Arizona State University	859	953	999	1,135	630	618	667	580
76 Colorado School of Mines	803	925	736	845	224	400	296	503
77 Clarkson University	794	805	445	436	654	635	396	393
78 University of New Mexico	792	705	357	232	635	575	289	150
79 University of Pittsburgh	760	805	787	817	621	659	658	727
80 University of Oklahoma	754	889	1,028	982	217	246	165	234
Total, 1st 80 insts.	230,182	223,196	202,328	187,831	173,881	171,237	154,279	144,223
81 Tulane University	744	495	649	327	420	162	270	182
82 University of Akron	741	674	726	528	441	446	446	287
83 Georgia State University	730	363	253	308	78	160	68	97
84 U of Iowa	725	797	730	882	528	641	523	609
85 NJ Inst of Technology	723	177	242	219	374	99	180	114
86 Columbia University	714	699	980	970	664	669	980	941
87 Kansas State University	711	770	763	476	223	176	143	71
88 U Arkansas Main	694	886	902	1,008	36	127	171	178
89 U of Missouri Columbia	682	530	362	344	283	236	325	294
90 U MA Dartmouth	681	208	271	--	668	1	192	--
Total, 1st 90 insts.	237,327	228,795	208,206	192,893	177,596	173,954	157,577	146,996
91 Northwestern University	673	764	777	855	582	702	721	642
92 Oklahoma State University	665	389	408	523	252	199	179	189
93 University of Delaware	625	612	654	573	523	518	564	445
94 U MD Baltimore County	621	553	558	565	621	553	558	565
95 U of Southwestern LA	619	557	593	529	49	12	0	9
96 Western Illinois U	581	349 i	324 i	253 i	465	267 i	209 i	158 i
97 Hofstra University	563	563	15	25	563	563	15	25
98 University of Kentucky	561	672	567	345	441	576	541	315
99 U CA Santa Cruz	534	482	394	378	242	300	183	176
100 University of Kansas	525	407	227	265	428	289	196	225
Total, 1st 100 insts.	243,294	234,143	212,723	197,204	181,762	177,933	160,743	149,745
Total, all other sampled insts.	28,758	37,888	34,788	32,891	19,162	24,984	22,319	20,740
Estimated total non-sampled insts.	6,491	0	0	0	4,710	0	0	0

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

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Table B-57. Total and federally financed R&D expenditures in the computer sciences at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

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Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
Total, all institutions	659,527	606,333	555,957	554,369	462,958	421,955	379,779	371,549
1 Johns Hopkins U	81,974	72,957	59,217	57,525	81,853	72,521	59,003	57,397
2 Carnegie Mellon U	58,803	53,788	48,123	45,090	49,129	42,346	36,311	33,342
3 U of Southern California	33,362	34,948	33,525	32,816	31,550	32,275	30,763	30,476
4 Georgia Institute of Tech	20,865	20,754	18,309	17,077	10,460	11,611	10,288	9,805
5 Cornell University	20,077	28,331	23,043	21,291	15,983	20,887	18,967	17,450
6 University of Michigan	16,600	19,678	21,469	10,453	13,061	12,949	13,865	6,347
7 University of Minnesota	15,705	11,302	12,999	25,186	11,271	8,590	10,631	22,705
8 U of Tennessee System	15,326	8,445	9,015	6,130	12,084	6,232	7,014	4,037
9 U MD College Park	14,040	9,404	8,218	6,569	7,065	3,891	3,441	3,423
10 U TX Austin	13,994	14,252	13,096	14,460	8,261	6,854	5,778	5,172
Total, 1st 10 insts	290,746	273,859	247,014	236,597	240,717	218,156	196,061	190,154
11 MA Institute of Tech	13,889	13,707	13,153	13,617	10,084	10,213	9,472	9,167
12 University of IL Urbana	13,886	17,192	19,575	18,067	6,511	8,770	9,733	8,836
13 Northwestern University	13,264	12,236	4,171	3,374	3,766	3,294	2,584	1,604
14 Stanford University	11,607	10,104	9,843	9,016	10,552	9,194	7,519	7,278
15 U CA San Diego	11,582	9,115	8,902	8,170	6,761	5,916	4,848	3,693
16 U MA Amherst	10,564	9,984	7,974	--	6,246	5,645	5,359	--
17 University of Colorado	9,677	4,722	2,754	4,027	5,474	2,378	1,774	2,692
18 Rice University	9,481	7,049	7,270	8,753	7,782	5,440	5,281	7,222
19 Ohio State University	8,466	6,789	6,857	7,076	1,686	1,172	1,340	974
20 New York University	8,213	7,965	7,809	7,029	6,080	7,566	6,753	6,092
Total, 1st 20 insts	401,375	372,722	335,322	315,726	305,659	277,744	250,724	237,712
21 Syracuse University	8,110	6,569	9,847	9,379	1,900	2,230	2,412	2,299
22 U of NC Chapel Hill	7,969	7,658	7,707	7,569	5,496	4,759	4,112	4,492
23 Oregon Grad Inst Sci Tech	7,193	4,515	2,409	1,888	4,140	2,439	1,651	1,478
24 SUNY Buffalo	7,050	7,099	6,258	4,199	4,512	5,840	5,274	3,238
25 University of Utah	7,010	7,487	6,333	3,500	6,047	6,414	5,119	2,386
26 U of Pennsylvania	6,871	6,883	6,572	6,904	5,282	5,351	5,572	6,139
27 Rutgers the State U NJ	6,729	3,986	4,566	4,298	4,212	1,725	1,707	1,704
28 U WI Madison	6,633	5,171	4,993	4,454	5,233	3,883	3,652	3,146
29 California Inst of Tech	5,677	6,161	4,676	4,793	5,461	5,674	4,331	4,091
30 West Virginia University	5,250	6,172	5,969	9,829	3,035	4,307	2,681	128
Total, 1st 30 insts	469,867	434,423	394,652	372,539	350,977	320,366	287,235	266,813
31 Worcester Polytech Inst	5,161	5,743	2,825	289	5,062	5,682	2,538	96
32 Washington University	5,053	4,437	5,358	4,833	3,774	3,491	3,407	2,385
33 U CA Los Angeles	4,639	3,755	3,902	3,608	3,880	3,003	3,080	2,273
34 U CA Santa Barbara	4,544	4,122	3,387	2,558	3,404	3,157	2,666	1,974
35 University of Arizona	4,460	3,993	2,945	2,919	3,096	2,422	1,587	1,740
36 Iowa State University	4,362	5,217	6,116	9,245	174	411	1,881	5,076
37 US Naval Postgrad School	4,345	2,620	2,878	1,421	4,345	2,595	2,878	1,421
38 Texas A&M University	4,111	3,496	3,694	5,047	941	1,233	1,337	1,440
39 University of Georgia	4,061	4,938	3,836	3,908	916	1,370	1,644	2,035
40 Michigan State University	4,008	12	0	0	0	6	0	0
Total, 1st 40 insts	514,611	472,756	429,593	406,367	376,569	343,736	308,253	285,253
41 Columbia University	3,923	3,188	3,338	3,936	3,263	2,402	2,456	3,108
42 University of Washington	3,875	3,596	2,942	2,250	3,563	3,443	2,698	2,082
43 U CA Irvine	3,863	4,032	3,803	3,820	2,998	3,194	3,042	2,814
44 Brown University	3,805	5,050	4,084	3,686	2,637	3,477	2,614	1,600
45 University of Virginia	3,536	2,936	2,715	2,769	2,983	2,141	1,897	2,027
46 U of Alabama Huntsville	3,440	3,405	2,743	2,789	2,102	2,110	1,745	1,805
47 Yale University	3,433	4,230	4,172	3,402	2,910	3,957	3,718	2,937
48 Purdue University	3,365	2,706	3,393	3,353	2,200	1,838	2,376	2,569
49 Princeton University	3,307	3,331	3,184	3,759	1,970	1,758	1,736	2,371
50 University of Delaware	3,170	2,385	1,663	1,448	2,403	1,760	1,224	1,129
Total, 1st 50 insts	550,328	507,615	461,630	437,579	403,598	369,816	331,759	307,695

See explanatory information and SOURCE at end of table.

Table B-57. Total and federally financed R&D expenditures in the computer sciences at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

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Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
51 New Mexico State U	2,719	3,120	2,771	8,357	2,036	2,287	2,398	6,388
52 U TX Arlington	2,701	1,085	859	850	563	116	136	152
53 University of Oklahoma	2,653	3,287	3,969	4,252	1,147	2,127	2,438	2,610
54 Indiana University	2,605	1,327	848	1,259	2,101	858	590	889
55 Wright State University	2,599	1,768	1,500	975	136	282	279	603
56 George Mason University	2,560	1,429	2,410	1,376	1,974	1,161	2,220	1,135
57 University of Florida	2,556	2,616	2,792	2,387	1,198	1,364	1,377	1,275
58 Sthrn IL U Carbondale	2,381	1,743	1,722	2,214	0	12	21	30
59 University of Rochester	2,377	2,318	1,826	1,521	2,198	2,172	1,674	1,402
60 U of Southwestern LA	2,359	4,743	3,767	2,873	439	175	440	399
Total, 1st 60 insts	575,838	531,051	484,094	463,643	415,390	380,370	343,332	322,578
61 Polytechnic University	2,341	0i	0	0	1,224	0i	0	0
62 Duke University	1,958	2,273	1,455	1,760	1,426	1,993	990	1,264
63 U of Nevada Las Vegas	1,875	1,914	1,413	11,141	1,505	1,203	694	11,133
64 University of Oregon	1,864	879	731	518	1,436	659	331	336
65 SUNY Stony Brook	1,857	1,570	2,019	1,570	1,263	917	1,376	1,045
66 University of Connecticut	1,817	2,089	2,196	1,807	297	292	0	116
67 University of Pittsburgh	1,773	1,527	1,041	1,055	1,438	1,256	828	537
68 Harvard University	1,751e	1,833	388	1,355	1,582	1,767	281	1,071
69 Drexel University	1,741	749	766	169	256	359	128	5
70 University of New Mexico	1,736	1,196	679	394	447	138	151	69
Total, 1st 70 insts	594,551	545,081	494,782	483,412	426,264	388.954	348,111	338,154
71 Clemson University	1,731	1,422	1,644	4,691	546	422	482	696
72 Florida International U	1,681	589	--	--	1,556	121	--	--
73 NJ Inst of Technology	1,551	483	376	479	380	151	147	31
74 Rensselaer Polytech Inst	1,395	1,545	1,425	1,593	685	774	682	743
75 VA Polytech Inst & St U	1,329	919	779	736	1,069	682	386	297
76 NC State U Raleigh	1,260	1,018	1,306	1,858	729	625	636	922
77 Pennsylvania State U	1,248	1,689	1,755	1,408	616	899	707	734
78 U CA Davis	1,244	92	297	635	1,155	0	0	0
79 University of Chicago	1,209	1,445	1,316	956	1,113	1,316	1,266	941
80 Arizona State University	1,205	1,062	1,629	1,133	697	557	472	619
Total, 1st 80 insts.	608,404	555,345	505,309	496,901	434,810	394,501	352,889	343,137
81 SUNY Binghamton	1,144	643	224	220	197	175	52	19
82 Northeastern University	1,094	1,590	1,405	1,318	1,076	1,543	1,367	951i
83 Clark Atlanta University	1,088	1,017	969	0	920	868	827	0
84 Florida Atlantic U	1,033	1,467	854	776	40	48	64	88
85 University Hawaii Manoa	1,032	928	860	198	893	911	720	175
86 U CA Berkeley	987	2,021	2,183	1,651	319	538	491	491
87 U of Missouri Kansas City	960	838	921	1,289	0	0	0	0
88 Florida State University	947	397	694	364	333	14	254	31
89 U of Nebraska Lincoln	947	1,053	1,060	1,177	229	380	391	506
90 Rockefeller University	937	728	691	276	0	0	0	0
Total, 1st 90 insts.	618,573	566,027	515,170	504,170	438,817	398,978	357,055	345,398
91 U of Central Florida	891	929	695	724	525	761	514	497
92 Oregon State University	888	873	920	937	415	373	358	347
93 Texas Tech University	869	849	681	527	357	276	94	8
94 U CA Santa Cruz	839	1,154	916	712	801	1,111	859	468
95 Colorado State University	765	550	381	413	555	283	270	241
96 Southern Methodist U	726	324	276	321	377	151	135	122
97 Old Dominion University	706	683	797	755	641	444	577	499
98 North Dakota State U	703	424	808	433	412	98	446	79
99 Monmouth College (NJ)	695	404i	184e	175	694	357i	141e	135
100 Brandeis University	685	471	545	331	387	155	283	188
Total, 1st 100 insts	626,340	572,688	521,373	509,498	443,981	402,987	360,732	347,982
Total, all other sampled insts	25,408	33,645	34,584	44,871	13,946	18,968	19,047	23,567
Estimated total non-sampled insts	7,779	0	0	0	5,031	0	0	0

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-58. R&D expenditures in the life sciences at universities and and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1994, by subfield			
					Agri-cultural sciences	Bio-logical sciences	Medical sciences	Other
Total, all institutions	11,520,581	10,849,679	10,196,031	9,471,947	1,662,655	3,759,343	5,633,792	464,791
1 U CA San Francisco	312,393	314,599	295,784	268,700	0	0	312,393	0
2 Johns Hopkins U	270,314	249,430	226,247	222,541	0	62,903	163,372	44,039
3 U WI Madison	222,482	212,123	202,187	187,200	25,999	73,922	118,871	3,690
4 University of Minnesota	219,241	236,421	224,221	222,512	55,887	41,984	116,123	5,247
5 University of Washington	218,998	216,655	192,469	172,710	7,154	89,824	107,389	14,631
6 University of Michigan	212,198	203,823	195,922	191,582	107	67,061	123,029	22,001
7 U CA Davis	199,638	193,843	183,504	178,466	99,518	38,465	61,655	0
8 Baylor Col of Medicine	186,865	172,252	167,998	161,084	0	90,336	96,529	0
9 Yale University	186,775	180,991	167,790	153,527	1,242	67,073	118,460	0
10 Cornell University	184,425	171,569	163,950	171,008	43,310	46,479	94,636	0
Total, 1st 10 insts.	2,213,329	2,151,706	2,020,072	1,929,330	233,217	578,047	1,312,457	89,608
11 U of Pennsylvania	183,502	171,715	162,020	143,981	498	56,634	120,609	5,761
12 U CA Los Angeles	178,014	178,798	170,979	157,174	0	18,791	155,395	3,828
13 Duke University	174,326	158,918	151,282	133,314	2,733	38,882	129,216	3,495
14 Washington University	168,452	157,620	149,515	141,528	0	71,539	93,906	3,007
15 Harvard University	168,143e	159,744	157,253	144,264	51e	82,766e	85,326e	0
16 University of Pittsburgh	157,299	145,177	127,935	104,112	0	5,469	148,850	2,980
17 U CA San Diego	156,724	153,495	141,979	129,711	0	13,903	142,821	0
18 Stanford University	152,104	142,057	155,678	138,735	0	11,623	140,159	322
19 U of NC Chapel Hill	150,449	133,978	120,223	107,075	0	66,988	69,892	13,569
20 Columbia University	148,100	132,312	127,113	119,235	0	58,783	88,466	851
Total, 1st 20 insts.	3,850,442	3,685,520	3,484,049	3,248,459	236,499	1,003,425	2,487,097	123,421
21 Texas A&M University	141,130	129,639	122,997	111,045	55,362	78,003	7,765	0
22 U of Alabama Birmingham	133,287	125,857	111,432	106,472	0	41,754	90,936	597
23 University of Georgia	130,849	120,779	116,753	114,576	63,668	51,250	15,931	0
24 U CA Berkeley	122,182	114,359	118,846	104,359	47,208	40,801	34,104	69
25 Emory University	121,583	106,481	89,463	82,778	0	27,612	73,221	20,750
26 U TX SW Med Ctr Dallas	118,398	114,258	102,263	94,511	0	47,086	71,312	0
27 Ohio State University	117,294	114,193	106,349	97,522	26,588	39,337	44,421	6,948
28 U TX MD Anderson Cncr	117,149	121,998	105,873	102,322	0	54,764	62,385	0
29 U of Southern California	117,145	103,156	95,233	87,695	0	7,315	101,676	8,154
30 University of Arizona	116,202	110,620	105,187	97,583	35,755	30,763	44,804	4,880
Total, 1st 30 insts.	5,085,661	4,846,860	4,558,445	4,247,322	465,080	1,422,110	3,033,652	164,819
31 U of Iowa	114,664	107,808	94,968	86,388	0	24,058	88,214	2,392
32 U MD Baltimore Prof Sch	110,866	111,772	100,312	100,163	0	16,630	88,693	5,543
33 New York University	110,518	99,503	95,774	87,436	0	37,892	51,132	21,494
34 University of Colorado	107,413	91,032	84,498	75,074	0	33,789	68,514	5,110
35 University of Florida	105,975	85,540	87,227	83,456	28,785	32,061	41,306	3,823
36 Louisiana St U, All Camp	102,957	95,758	90,969	80,166	45,077	35,697	16,551	5,632
37 Michigan State University	101,327	84,705	81,787	76,581	53,965	31,796	14,213	1,353
38 Case Western Reserve U	98,002	89,427	82,364	71,887	0	61,118	36,782	102
39 Pennsylvania State U	96,520	92,148	90,125	86,055	36,444	38,826	17,589	3,661
40 Yeshiva University	92,881	89,636	87,196	86,721	0	24,150	48,298	20,433
Total, 1st 40 insts.	6,126,784	5,794,189	5,453,665	5,081,249	629,351	1,758,127	3,504,944	234,362
41 SUNY Buffalo	91,711	80,868	76,580	69,283	0	39,739	46,503	5,469
42 University of Rochester	88,367	89,730	87,647	89,004	0	31,923	52,017	4,427
43 Northwestern University	87,992	75,472	70,979	79,551	0	33,790	50,318	3,884
44 U Med & Dent NJ	86,866	76,410	84,505	80,787	0	36,479	50,387	0
45 U of Missouri Columbia	86,852	74,708	71,032	72,022	40,662	22,941	22,772	477
46 NC State U Raleigh	86,319	81,135	76,021	73,215	45,258	40,254	0	807
47 CUNY Mt Sinai Sch Med	86,179	75,337	75,561	66,310	0	18,811	67,368	0
48 Purdue University	84,027	74,151	69,657	70,314	30,552	40,246	10,505	2,724
49 University of Miami	84,018	83,633	71,815	70,868	0	15,140	68,779	99
50 Vanderbilt University	83,959	74,218	75,026	59,736	0	45,635	30,526	7,798
Total, 1st 50 insts.	6,993,074	6,579,851	6,212,488	5,812,339	745,823	2,083,085	3,904,119	260,047

See explanatory information and SOURCE at end of table.

Table B-58. R&D expenditures in the life sciences at universities and and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

Page 2 of 3

Institution and ranking	1994	1993	1992	1991	1994, by subfield			
					Agricultural sciences	Biological sciences	Medical sciences	Other
51 University of IL Chicago	83,844	79,538	75,258	64,725	0	23,302	53,832	6,710
52 U TX Hlth Sci Ctr San Ant	83,535	75,239	65,179	51,768	0	22,576	60,959	0
53 Indiana University	81,488	75,107	69,349	62,685	0	24,146	54,209	3,133
54 Iowa State University	79,520	79,053	71,224	62,329	32,919	30,341	10,723	5,537
55 University of Chicago	78,823	72,595	79,388	77,696	0	26,304	51,534	985
56 Rutgers the State U NJ	78,384	73,650	69,760	64,588	22,443	36,704	14,275	4,962
57 University of Kentucky	78,171	72,789	65,787	58,612	32,473	1,370	41,724	2,604
58 University of Virginia	76,442	66,704	60,441	50,807	0	27,812	47,691	939
59 University of Connecticut	75,294	76,948	73,136	75,544	7,648	26,651	40,629	366
60 U of Tennessee System	73,866	71,803	64,084	63,634	26,373	20,864	23,947	2,682
Total, 1st 60 insts.	7,782,441	7,323,277	6,906,094	6,444,727	867,679	2,323,155	4,303,642	287,965
61 U TX Med Br Galveston	72,773	67,998	57,672	45,086	0	0	72,503	270
62 Georgetown University	72,439	63,357	54,878	50,375	0	14,318	58,121	0
63 Oregon State University	72,240	68,080	62,669	57,612	51,087	18,582	2,571	0
64 U of Nebraska Lincoln	71,200	67,964	60,593	59,898	54,435	10,713	6,052	0
65 Virginia Commonwealth U	70,569	71,270	64,331	61,605	0	23,983	44,668	1,918
66 U CA Irvine	70,102	66,886	59,902	55,419	0	38,919	31,183	0
67 Wayne State University	69,159	62,874	56,634	49,221	0	1,030	63,154	4,975
68 Rockefeller University	67,139	67,277	67,004	64,552	0	62,780	4,359	0
69 University of Cincinnati	65,469	64,906	62,226	54,707	0	36,703	28,766	0
70 U TX Hlth Sci Ctr Houston	65,238	58,178	54,665	53,402	0	18,432	43,636	3,170
Total, 1st 70 insts.	8,478,769	7,982,067	7,506,668	6,996,604	973,201	2,548,615	4,658,655	298,298
71 Boston University	64,285	63,741	58,315	53,665	0	3,632	59,025	1,628
72 University of Utah	63,996	65,207	69,005	60,708	0	26,219	36,078	1,699
73 Colorado State University	62,196	57,825	52,626	39,548	30,027	26,356	5,723	90
74 U MA Worcester	61,790	60,602	53,342	--	0	19,398	22,740	19,652
75 Tufts University	61,668	55,545e	49,266e	38,493	0	53,300	6,727	1,641
76 Tulane University	61,322	57,770	53,194	55,581	0	8,436	28,169	24,717
77 Oregon Health Sciences U	60,871	54,978i	47,684i	40,272i	0	15,026	40,815	5,030
78 University of Kansas	57,486	49,786	42,582	37,315	281	32,062	18,302	6,841
79 SUNY Stony Brook	56,949	56,711	52,657	46,642	0	32,198	24,535	216
80 Thomas Jefferson U	56,932	51,106	41,329	33,066	0	29,923	26,557	452
Total, 1st 80 insts.	9,086,264	8,555,338	8,026,668	7,401,894	1,003,509	2,795,165	4,927,326	360,264
81 U of South Florida	56,049	50,539	42,200	44,554	0	1,622	54,116	311
82 Washington State U	55,918	58,054	56,626	51,727	23,735	27,397	2,745	2,041
83 University of IL Urbana	55,519	54,529	58,097	51,838	30,418	22,280	2,821	0
84 VA Polytech Inst & St U	51,945	51,095	51,855	52,164	41,310	8,073	2,043	519
85 Wake Forest University	51,090	56,478	48,901	43,223	0	280	50,810	0
86 Medical Col of Wisconsin	49,604	48,689	43,579	40,446	0	11,409	38,195	0
87 U CA Riverside	48,368	49,153	49,488	49,362	42,625	3,796	1,947	0
88 University of Vermont	46,542	45,726	45,533	42,285	6,334	17,617	20,808	1,783
89 Med U of South Carolina	46,249	42,543	31,900	25,877	0	11,355	27,667	7,227
90 Kansas State University	46,060	44,871	41,541	39,863	33,059	12,128	873	0
Total, 1st 90 insts.	9,593,608	9,057,015	8,496,388	7,843,233	1,180,990	2,911,122	5,129,351	372,145
91 Auburn University	44,814	40,054	40,989	40,774	29,810	9,442	3,887	1,675
92 Dartmouth College	43,869	47,169	43,070	35,637	0	2,199	41,670	0
93 University of Oklahoma	43,580	40,577	40,591	34,302	0	15,789	18,684	9,107
94 Mississippi State U	41,822	40,198	36,247	36,510	37,695	3,201	922	4
95 Temple University	39,870	36,321	34,144	38,985	0	21,237	18,589	44
96 SUNY Albany	37,996	19,869	19,373	2,844	0	37,996	0	0
97 MA Institute of Tech	37,690	35,792	38,101	34,398	0	37,690	0	0
98 U Arkansas Main	36,942	37,500	26,812	24,756	35,176	1,766	0	0
99 Rush University	36,304	29,897	24,000	25,341	0	7,324	22,009	6,971
100 Oklahoma State University	35,751	38,176	38,613	34,743	23,242	11,177	1,283	49
Total, 1st 100 insts.	9,992,246	9,422,568	8,838,328	8,151,523	1,306,913	3,058,943	5,236,395	389,995

See explanatory information and SOURCE at end of table.

Table B-58. R&D expenditures in the life sciences at universities and and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1994, by subfield			
					Agricultural sciences	Biological sciences	Medical sciences	Other
101 Clemson University	35,024	37,009	37,240	34,752	23,218	8,276	1,065	2,465
102 University of Idaho	34,860	32,440	29,427	24,828	29,700	4,816	344	0
103 U of NE Med Ctr Omaha	33,997	31,669	31,564	27,858	0	21,446e	12,551	0
104 Loyola U of Chicago	32,109	25,291	27,683	21,229	0	15,218	13,976	2,915
105 The Medical Col of PA	30,473	24,996	25,835	24,645	0	15,093	15,380	0
106 University of New Mexico	30,464	27,838	26,294	29,881	0	14,642	9,253	6,569
107 U MD College Park	30,341	63,254	62,624	72,859	13,748	10,872	1,644	4,077
108 University Hawaii Manoa	29,589	29,276	28,153	27,060	10,122	10,385	1,773	7,309
109 Medical Col of Georgia	28,020	24,935	21,426	12,082	0	14,949	12,810	261
110 SUNY Hlth Sci Ctr Brklyn	27,773	27,645	24,171	32,824	0	7,832	19,856	85
Total, 1st 110 insts.	10,304,896	9,746,921	9,152,745	8,459,541	1,383,701	3,182,472	5,325,047	413,676
111 Unif Svcs U of Hlth Sci	27,334	30,846	27,875i	24,904i	0	9,702	17,632	0
112 West Virginia University	27,054	24,915	25,486	23,283	15,194	3,636	8,157	67
113 Utah State University	26,319	23,112	23,233	22,247	18,142	5,725	2,452	0
114 California Inst of Tech	25,670	21,982	24,954	26,275	0	25,670	0	0
115 North Dakota State U	25,000	24,543	24,045	19,130	16,549	7,912	539	0
116 Montana State University	24,839	22,132	22,634	20,272	18,773	6,050	0	16
117 U TX Austin	23,584	20,830	19,472	18,726	0	15,323	5,968	2,293
118 U Arkansas Medical Sci	22,762	15,686	15,889	14,250	0	8,057	14,705	0
119 Brown University	21,537	20,632	19,652	17,979	0	3,857	15,917	1,763
120 Texas Tech University	20,018	18,227	18,149	17,260	8,041	6,211	5,734	32
Total, 1st 120 insts.	10,549,013	9,969,826	9,374,134	8,663,867	1,460,400	3,274,615	5,396,151	417,847
121 St Louis University	19,937	19,886	19,222	18,493	0	8,947	10,400	590
122 New Mexico State U	19,327	20,763	20,452	18,183	15,535	3,686	64	42
123 U of South Carolina	18,901	16,307	15,603	15,674	0	4,923	13,398	580
124 New York Medical College	18,725	18,491i	16,799	14,633	0	9,571	9,154	0
125 U of Alaska Fairbanks	18,053i	14,797i	16,880	16,908	8,139i	9,914i	0i	0
126 Med Col Hampton Roads	17,873	15,818	11,238	11,112	0	5,531	12,342	0
127 U PR Med Sci Campus	17,765	14,622	18,296	11,014	0	0	17,765	0
128 Florida A&M University	17,464	17,120i	16,698	13,686	8,183	8,786	169	326
129 U of Nevada Reno	17,248	15,775	16,328	11,816	8,378	7,011	1,186	673
130 U MA Amherst	17,229	17,123	16,837	--	9,190	6,014	0	2,025
Total, 1st 130 insts.	10,731,535	10,140,528	9,542,487	8,795,386	1,509,825	3,338,998	5,460,629	422,083
131 University of Wyoming	16,967	16,679	13,987	12,558	11,210	5,141	616	0
132 George Washington U	16,556	15,828	17,910	16,988	0	4,498	10,771	1,287
133 U Mississippi, All Camp	16,330	15,000	14,250	15,195	0	6,850	9,478	2
134 Princeton University	16,239	15,481	16,684	18,513	0	16,239	0	0
135 U of Maine	15,864	14,214	12,443	15,586	8,185	7,670	9	0
136 Brandeis University	15,807	16,766	16,177	15,608	0	15,807	0	0
137 San Diego St University	15,421	15,836	13,414	12,518	16	7,940	6,932	533
138 U PR Mayaguez	14,908	13,835	22,800i	24,985i	14,231	613	64	0
139 University of Louisville	14,815	14,320	12,968	12,762	0	5,080	8,251	1,484
140 Med Col PA Hahnemann U	14,745	17,756	18,203	13,169	0	4,457	10,288	0
Total, 1st 140 insts.	10,889,187	10,296,243	9,701,323	8,953,268	1,543,467	3,413,293	5,507,038	425,389
141 Sthrn IL U Carbondale	14,572	12,598	12,708	12,578	3,906	3,405	6,821	440
142 Med Col of Ohio Toledo	12,299	11,881	10,905	9,353	0	9,212	3,015	72
143 University of Delaware	12,061	11,402	11,595	10,762	11,378	439	0	244
144 SUNY Hlth Sci Ctr Syrcse	11,751	12,453	12,992	14,564	0	6,159	5,592	0
145 U of South Alabama	11,629	10,848	10,789	11,205	0	8,669	2,687	273
146 Carnegie Mellon U	11,597	13,916	12,957	12,568	0	7,197	0	4,400
147 South Dakota State U	11,344	11,113	9,900	9,138	8,180	2,334	180	650
148 Wright State University	11,296	11,994	9,346	7,696	0	1,958	9,125	213
149 SUNY Col Env Sci Frstry	11,104	10,918	9,189	7,892	3,252	7,852	0	0
150 University of Montana	10,687	9,842	6,404	5,143	5,463	4,741	349	134
Total, 1st 150 insts.	11,007,527	10,413,208	9,808,108	9,054,167	1,575,646	3,465,259	5,534,807	431,815
Total, all other sampled insts.	439,032	436,471	387,923	417,780	71,580	239,979	96,302	31,171
Estimated total non-sampled insts.	74,022	0	0	0	15,429	54,105	2,683	1,805

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-59. Federally financed R&D expenditures in the life sciences at universities and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

Page 1 of 3

Institution and ranking	1994	1993	1992	1991	1994, by subfield			
					Agricultural sciences	Biological sciences	Medical sciences	Other
Total, all institutions	6,758,287	6,385,354	5,910,653	5,418,269	495,063	2,459,306	3,531,413	272,505
1 Johns Hopkins U	223,732	204,479	184,460	177,528	0	52,339	134,325	37,068
2 U CA San Francisco	213,252	210,148	202,283	190,936	0	0	213,252	0
3 University of Washington	177,093	173,393	157,375	137,829	4,974	77,961	83,175	10,983
4 U of Pennsylvania	140,717	130,233	118,174	107,024	127	47,087	89,962	3,541
5 Yale University	139,449	136,069	125,966	119,459	447	52,049	86,953	0
6 University of Michigan	137,988	126,885	118,810	117,241	104	46,271	77,659	13,954
7 U CA San Diego	130,681	126,016	116,557	105,192	0	12,705	117,976	0
8 University of Pittsburgh	126,263	117,065	101,585	82,844	0	3,446	120,495	2,322
9 Stanford University	124,208	113,245	107,453	102,844	0	9,985	114,002	221
10 Columbia University	123,331	116,106	108,904	99,324	0	48,680	74,454	197
Total, 1st 10 insts.	1,536,714	1,453,639	1,341,567	1,240,221	5,652	350,523	1,112,253	68,286
11 Harvard University	122,176	123,020	119,764	105,772	0	65,373	56,803	0
12 Washington University	120,518	113,093	108,721	99,744	0	56,106	62,363	2,049
13 U CA Los Angeles	120,497	121,961	113,800	105,228	0	14,446	103,284	2,767
14 University of Minnesota	118,286	118,145	112,873	102,774	11,663	26,376	76,862	3,385
15 U WI Madison	113,254	108,025	103,548	95,697	7,709	40,487	63,195	1,863
16 U of NC Chapel Hill	112,974	99,994	88,104	81,066	0	50,858	54,591	7,525
17 Duke University	110,864	101,794	97,305	92,290	870	30,801	76,756	2,437
18 Cornell University	101,392	94,826	86,116	84,208	12,640	27,604	61,148	0
19 U of Alabama Birmingham	95,778	92,246	80,614	74,489	0	31,006	64,416	356
20 U CA Davis	93,866	86,415	74,989	65,716	34,822	17,278	41,766	0
Total, 1st 20 insts.	2,646,319	2,513,158	2,327,401	2,147,205	73,356	710,858	1,773,437	88,668
21 Baylor Col of Medicine	92,404	87,623	85,734	78,752	0	60,164	32,240	0
22 Emory University	81,787	73,674	63,043	55,188	0	23,212	43,559	15,016
23 University of Colorado	79,343	69,804	63,928	56,353	0	26,092	50,855	2,396
24 Case Western Reserve U	75,771	69,872	62,411	55,712	0	47,516	28,158	97
25 U of Iowa	74,873	70,492	63,937	59,198	0	17,503	57,124	246
26 U of Southern California	74,810	70,287	60,191	58,538	0	5,553	62,714	6,543
27 Vanderbilt University	71,988	66,346	62,685	54,887	0	39,026	26,138	6,824
28 U TX SW Med Ctr Dallas	71,468	67,943	61,499	57,746	0	31,840	39,628	0
29 New York University	70,854	72,187	69,611	64,335	0	26,270	31,517	13,067
30 Yeshiva University	70,718	71,771	68,152	67,831	0	18,387	36,773	15,558
Total, 1st 30 insts.	3,410,335	3,233,157	2,988,592	2,755,745	73,356	1,006,421	2,182,143	148,415
31 University of Chicago	65,960	61,439	65,435	64,241	0	22,823	42,330	807
32 University of Rochester	65,537	68,701	66,543	71,086	0	27,464	35,286	2,787
33 SUNY Buffalo	62,175	59,368	57,144	50,923	0	31,205	26,911	4,059
34 U MD Baltimore Prof Sch	59,727	53,556	48,088	43,682	0	8,959	47,782	2,986
35 University of Arizona	59,396	57,305	54,515	48,095	9,872	18,449	27,206	3,869
36 University of Miami	58,336	58,196	53,692	48,164	0	12,448	45,802	86
37 Ohio State University	58,037	57,418	49,873	45,090	6,289	23,113	23,915	4,720
38 U CA Berkeley	57,209	53,477	48,466	45,570	14,715	32,583	9,911	0
39 CUNY Mt Sinai Sch Med	55,188	49,800	50,853	42,035	0	16,115	39,073	0
40 University of Florida	51,781	45,607	43,203	39,875	11,276	18,000	20,263	2,242
Total, 1st 40 insts.	4,003,681	3,798,024	3,526,404	3,254,506	115,508	1,217,580	2,500,622	169,971
41 U TX Hlth Sci Ctr San Ant	51,671	48,467	41,048	32,770	0	20,140	31,531	0
42 Boston University	51,295	50,624	47,243	44,027	0	3,212	47,341	742
43 University of Utah	50,386	52,749	51,938	45,910	0	22,007	27,188	1,191
44 Indiana University	50,302	46,584	41,786	36,076	0	15,152	33,172	1,978
45 Georgetown University	47,943	41,131	35,335	33,957	0	11,133	36,810	0
46 University of Virginia	47,377	41,659	36,557	31,761	0	22,036	24,685	656
47 Northwestern University	46,146	41,409	37,909	35,117	0	24,356	20,412	1,378
48 U TX Hlth Sci Ctr Houston	45,962	38,137	35,940	32,301	0	14,828	30,577	557
49 Virginia Commonwealth U	45,295	46,036	43,290	42,929	0	17,891	26,412	992
50 Pennsylvania State U	45,118	45,410	43,460	39,322	8,203	25,151	9,843	1,921
Total, 1st 50 insts.	4,485,176	4,250,230	3,940,910	3,628,676	123,711	1,393,486	2,788,593	179,386

See explanatory information and SOURCE at end of table.

Table B-59. Federally financed R&D expenditures in the life sciences at universities and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1994, by subfield: Agricultural sciences	Biological sciences	Medical sciences	Other
51 University of Georgia	43,577	41,856	39,128	34,728	12,746	27,915	2,916	0
52 Thomas Jefferson U	43,215	38,293	28,861	23,100	0	25,905	16,861	449
53 University of IL Chicago	43,159	38,859	36,923	33,316	0	14,056	27,311	1,792
54 Tufts University	43,115	38,439	34,468	31,624	0	37,984	4,224	907
55 Michigan State University	42,179	39,470	34,266	31,781[i]	15,872	18,368	7,201	738
56 U CA Irvine	42,142	40,665	33,352	32,290	0	31,610	10,532	0
57 Oregon Health Sciences U	40,980	37,362[i]	32,210[i]	27,744[i]	0	11,685	24,799	4,496
58 U Med & Dent NJ	40,687	35,524	39,092	38,768	0	16,053	24,634	0
59 University of Cincinnati	39,706	40,519	39,596	34,159	0	24,489	15,217	0
60 U TX MD Anderson Cncr	39,572	38,065	31,561	29,336	0	19,516	20,056	0
Total, 1st 60 insts.	4,903,508	4,639,282	4,290,367	3,945,522	152,329	1,621,067	2,942,344	187,768
61 SUNY Stony Brook	37,088	35,952	33,866	30,230	0	21,373	15,690	25
62 University of Kentucky	36,168	30,362	26,957	23,700	8,345	1,208	26,057	558
63 Rockefeller University	35,994	33,148	33,354	32,571	0	31,735	4,259	0
64 U of Tennessee System	35,803	33,375	30,592	29,582	5,755	15,790	12,691	1,567
65 Wake Forest University	35,720	41,163	36,886	32,811	0	113	35,607	0
66 Colorado State University	35,455	39,663	37,660	26,232	15,569	16,323	3,563	0
67 Wayne State University	35,208	32,745	28,707	25,323	0	481	32,296	2,431
68 U MA Worcester	34,923	33,820	35,413	--	0	17,088	16,419	1,416
69 University of Connecticut	33,986	36,023	33,685	34,516	1,179	14,077	18,672	58
70 Purdue University	33,903	27,707	25,469	27,515	8,713	17,107	6,198	1,885
Total, 1st 70 insts.	5,257,756	4,983,240	4,612,956	4,208,002	191,890	1,756,362	3,113,796	195,708
71 Texas A&M University	33,685	31,418	31,859	23,178	10,955	18,084	4,646	0
72 U TX Med Br Galveston	32,775	30,555	24,281	20,974	0	0	32,775	0
73 Oregon State University	32,480	30,390	28,158	24,112	22,637	8,945	898	0
74 Louisiana St U, All Camp	32,301	30,824	27,990	26,496	1,399	21,633	8,924	345
75 MA Institute of Tech	32,121	31,601	33,345	33,289	0	32,121	0	0
76 Dartmouth College	31,791	35,063	31,626	27,563	0	1,460	30,331	0
77 Medical Col of Wisconsin	31,459	31,261	27,668	25,062	0	7,236	24,223	0
78 Tulane University	30,968	29,267	25,928	30,518	0	5,287	11,494	14,187
79 University of Vermont	30,901	29,456	30,767	28,356	3,096	13,933	13,489	383
80 Med U of South Carolina	28,507	21,471	17,174	14,367	0	7,790	14,020	6,697
Total, 1st 80 insts.	5,574,744	5,284,546	4,891,752	4,461,917	229,977	1,872,851	3,254,596	217,320
81 NC State U Raleigh	27,879	27,175	22,345	20,177	12,641	15,153	0	85
82 University of IL Urbana	27,279	26,217	26,433	23,033	10,011	16,151	1,117	0
83 University of Kansas	25,134	23,096	19,523	15,655	153	13,911	8,002	3,068
84 Iowa State University	24,726	23,387	19,752	17,328	10,219	11,122	1,350	2,035
85 Rutgers the State U NJ	23,741	21,031	18,987	16,372	4,370	11,877	6,956	538
86 U of Missouri Columbia	22,627	21,850	20,848	20,858	8,037	8,213	6,223	154
87 SUNY Albany	22,203	15,717	15,445	2,031	0	22,203	0	0
88 Washington State U	21,718	23,635	22,342	20,302	6,864	12,571	494	1,789
89 Loyola U of Chicago	20,975	15,948	16,439	13,720	0	9,608	9,754	1,613
90 California Inst of Tech	20,863	18,782	21,252	20,485	0	20,863	0	0
Total, 1st 90 insts.	5,811,889	5,501,384	5,095,118	4,631,878	282,272	2,014,523	3,288,492	226,602
91 U of Nebraska Lincoln	20,352	15,156	17,019	19,845	16,355	2,937	1,060	0
92 Temple University	18,588	17,099	16,483	20,532	0	10,181	8,398	9
93 University of New Mexico	18,573	16,902	15,837	13,297	0	10,024	5,143	3,406
94 Unif Svcs U of Hlth Sci	18,124	22,319	20,377[i]	18,436[i]	0	6,530	11,594	0
95 St Louis University	17,316	17,644	17,005	15,680	0	8,223	8,602	491
96 SUNY Hlth Sci Ctr Brklyn	16,695	17,916	15,896	17,949	0	4,776	11,871	48
97 The Medical Col of PA	16,130	16,990	17,914	14,960	0	10,150	5,980	0
98 U TX Austin	15,924	13,312	12,372	10,492	0	10,662	3,688	1,574
99 University of Oklahoma	15,142	13,604	11,742	10,686	0	7,391	6,805	946
100 New York Medical College	14,913	13,468[i]	13,061	11,056	0	7,773	7,140	0
Total, 1st 100 insts.	5,983,646	5,665,794	5,252,824	4,784,811	298,627	2,093,170	3,358,773	233,076

See explanatory information and SOURCE at end of table.

Table B-59. Federally financed R&D expenditures in the life sciences at universities and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1994, by subfield			
					Agri-cultural sciences	Bio-logical sciences	Medical sciences	Other
101 Brown University	14,561	14,225	13,354	13,775	0	2,366	11,012	1,183
102 Florida A&M University	14,160	14,084i	13,894	12,066	6,889	7,110	161	0
103 VA Polytech Inst & St U	14,008	13,466	12,344	12,257	10,073	3,314	333	288
104 West Virginia University	13,928	11,877	12,502	10,567	6,505	3,018	4,338	67
105 U CA Riverside	13,859	12,498	11,622	10,382	11,023	1,472	1,364	0
106 University Hawaii Manoa	13,801	12,406	10,987	10,419	2,184	5,910	1,355	4,352
107 Rush University	13,410	11,203	8,195	6,174	0	4,363	4,520	4,527
108 U Arkansas Medical Sci	13,410	10,964	9,642	7,807	0	5,194	8,216	0
109 Kansas State University	12,802	12,658	11,617	10,404	7,124	5,538	140	0
110 Mississippi State U	12,346	11,875	11,984	11,033	10,939	1,149	258	0
Total, 1st 110 insts.	6,119,931	5,791,050	5,368,965	4,889,695	353,364	2,132,604	3,390,470	243,493
111 U of NE Med Ctr Omaha	12,256	10,131	9,740	10,518	0	8,428	3,828	0
112 U PR Med Sci Campus	11,973	9,775	14,619	8,610	0	0	11,973	0
113 University of Idaho	11,942	11,678	10,188	8,523	9,713	2,153	76	0
114 Brandeis University	11,385	12,203	11,592	11,542	0	11,385	0	0
115 Clemson University	11,038	10,975	7,435	7,693	7,317	2,608	336	777
116 Utah State University	10,999	9,233	9,957	9,326	7,312	2,321	1,366	0
117 Med Col PA Hahnemann U	10,194	9,674	9,797	7,492	0	3,240	6,954	0
118 Med Col Hampton Roads	10,162	9,753	6,966	7,093	0	2,479	7,683	0
119 Princeton University	10,058	9,083	11,044	10,891	0	10,058	0	0
120 U of South Carolina	9,776	8,390	7,364	8,352	0	3,288	6,064	424
Total, 1st 120 insts.	6,229,714	5,891,945	5,467,667	4,979,735	377,706	2,178,564	3,428,750	244,694
121 George Washington U	9,637	10,210	13,397	13,185	0	3,125	6,397	115
122 U Mississippi, All Camp	9,444	8,116	8,555	9,132	0	5,185	4,257	2
123 U MD College Park	9,435	8,551	7,528	10,357e	2,882	4,958	65	1,530
124 Medical Col of Georgia	9,121	7,713	7,747	8,081	0	6,135	2,986	0
125 Montana State University	9,035	8,592	7,167	6,115	5,456	3,563	0	16
126 Med Col of Ohio Toledo	8,726	8,282	7,083	5,970	0	7,674	1,030	22
127 Auburn University	8,660	8,123	6,604	5,843	5,671	2,410	574	5
128 U Arkansas Main	8,606	8,898	7,980	7,506	8,202	404	0	0
129 Meharry Medical College	8,593	8,646	6,673	7,014	0	6,035	1,757	801
130 U of Nevada Reno	8,451	7,840	7,152	5,054	1,721	5,814	266	650
Total, 1st 130 insts.	6,319,422	5,976,916	5,547,553	5,057,992	401,638	2,223,867	3,446,082	247,835
131 University of Wyoming	8,428	8,243	7,145	6,041	4,838	3,217	373	0
132 Albany Medical College	8,344	8,564	6,740	6,291	0	4,495	3,849	0
133 New Mexico State U	7,971	9,716	8,912	7,728	5,088	2,784	60	39
134 U of South Alabama	7,804	7,436	7,084	6,902	0	5,669	1,908	227
135 C R Drew U of Med & Sci	7,674	6,483	5,949	5,311	0	0	7,674	0
136 Oklahoma State University	7,572	8,723	7,626	6,625	4,073	3,303	155	41
137 Howard University	7,419	8,039	7,340	3,714	0	927	6,414	78
138 U of South Florida	7,286	7,594	7,563	7,761	0	524	6,752	10
139 University of Oregon	7,218	7,755	7,177	6,062	0	7,218	0	0
140 U MA Amherst	6,655	7,152	7,222	--	1,954	4,044	0	657
Total, 1st 140 insts.	6,395,793	6,056,621	5,620,311	5,114,427	417,591	2,256,048	3,473,267	248,887
141 SUNY Hlth Sci Ctr Syrcse	6,555	7,238	7,500	10,667	0	4,675	1,880	0
142 Morehouse School of Med	6,493	6,429	6,155i	5,610i	0	6,367	126	0
143 University of Louisville	6,369	6,081	5,546	5,349	0	2,755	3,068	546
144 U of Alaska Fairbanks	6,265i	6,394i	4,927	5,355	2,159i	4,106i	0i	0
145 Wright State University	6,225	6,549	5,572	4,887	0	812	5,399	14
146 Texas Tech University	6,100	5,254	5,486	4,343	1,660	3,241	1,199	0
147 Carnegie Mellon U	6,089	6,514	5,070	5,197	0	5,454	0	635
148 San Diego St University	6,066	9,225	7,393	7,364	0	4,716	1,250	100
149 Sthrn IL U Carbondale	6,037	5,782	5,461	5,121	1,726	1,590	2,672	49
150 University of Montana	5,456	4,682	3,722	2,674	1,793	3,377	286	0
Total, 1st 150 insts.	6,457,448	6,120,769	5,677,143	5,170,994	424,929	2,293,141	3,489,147	250,231
Total, all other sampled insts.	264,126	264,585	233,510	247,275	62,548	139,897	40,835	20,846
Estimated total non-sampled insts.	36,713	0	0	0	7,586	26,268	1,431	1,428

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-60. Total and federally financed R&D expenditures in the agricultural sciences at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

Page 1 of 2

Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
Total, all institutions	1,662,655	1,558,086	1,512,300	1,458,432	495,063	449,696	417,741	377,281
1 U CA Davis	99,518	99,428	93,877	92,896	34,822	29,917	23,967	18,040
2 University of Georgia	63,668	57,269	55,371	55,861	12,746	11,251	9,982	8,532
3 University of Minnesota	55,887	59,265	48,107	50,863	11,663	10,745	9,609	9,470
4 Texas A&M University	55,362	49,598	45,772	40,244	10,955	10,349	9,767	6,065
5 U of Nebraska Lincoln	54,435	51,431	49,273	48,814	16,355	11,300	15,060	18,514
6 Michigan State University	53,965	33,694	49,432	46,285i	15,872	15,701	15,505	14,381i
7 Oregon State University	51,087	35,740	32,292	31,921	22,637	13,098	11,452	10,438
8 U CA Berkeley	47,208	47,751	47,063	47,719	14,715	15,421	14,218	13,985
9 NC State U Raleigh	45,258	42,047	40,245	37,659	12,641	12,213	10,146	7,797
10 Louisiana St U, All Camp	45,077	40,713	41,110	38,406	1,399	1,044	1,051	854
Total, 1st 10 insts.	571,465	516,936	502,542	490,668	153,805	131,039	120,757	108,076
11 Cornell University	43,310	39,002	37,262	43,900	12,640	11,462	9,263	9,178
12 U CA Riverside	42,625	43,090	43,151	42,555	11,023	10,174	9,189	7,759
13 VA Polytech Inst & St U	41,310	38,493	38,668	35,933	10,073	9,057	7,844	7,011
14 U of Missouri Columbia	40,662	30,402	30,376	31,425	8,037	6,840	6,282	5,471
15 Mississippi State U	37,695	36,674	32,912	33,339	10,939	10,662	10,681	9,929
16 Pennsylvania State U	36,444	35,739	34,594	35,852	8,203	8,431	7,632	7,720
17 University of Arizona	35,755	32,499	31,089	28,353	9,872	8,487	7,644	6,471
18 U Arkansas Main	35,176	35,160	24,867	22,997	8,202	8,102	7,354	7,158
19 Kansas State University	33,059	33,209	32,176	31,691	7,124	7,514	7,706	7,469
20 Iowa State University	32,919	33,996	34,288	25,216	10,219	8,541	10,406	8,558
Total, 1st 20 insts.	950,420	875,200	841,925	821,929	250,137	220,309	204,758	184,800
21 University of Kentucky	32,473	33,959	31,730	29,971	8,345	7,650	7,896	7,134
22 Purdue University	30,552	24,519	23,316	24,010	8,713	4,351	3,746	4,232
23 University of IL Urbana	30,418	30,586	28,792	26,036	10,011	9,962	8,221	7,098
24 Colorado State University	30,027	26,801	21,569	14,990	15,569	17,776	13,845	9,336
25 Auburn University	29,810	27,648	27,409	27,875	5,671	5,537	5,103	4,759
26 University of Idaho	29,700	29,578	26,361	18,998	9,713	11,169	9,205	6,445
27 University of Florida	28,785	20,807	24,265	23,958	11,276	9,616	8,920	8,010
28 Ohio State University	26,588	28,036	32,752	30,203	6,289	7,380	8,134	8,265
29 U of Tennessee System	26,373	25,290	21,964	22,068	5,755	5,370	5,139	4,570
30 U WI Madison	25,999	27,119	25,586	23,154	7,709	9,016	9,329	8,269
Total, 1st 30 insts.	1,241,145	1,149,543	1,105,669	1,063,192	339,188	308,136	284,296	252,918
31 Washington State U	23,735	25,488	26,543	24,581	6,864	8,497	9,126	8,082
32 Oklahoma State University	23,242	23,219	23,980	23,712	4,073	4,170	3,835	3,669
33 Clemson University	23,218	23,966	25,104	24,770	7,317	7,107	4,028	4,013
34 Rutgers the State U NJ	22,443	22,446	20,206	21,252	4,370	3,728	3,164	3,104
35 Montana State University	18,773	16,241	15,264	11,713	5,456	5,251	3,832	3,067
36 Utah State University	18,142	15,657	14,947	13,166	7,312	6,263	6,449	5,502
37 North Dakota State U	16,549	17,433	17,412	11,835	3,821	3,738	3,599	2,844
38 New Mexico State U	15,535	13,970	12,800	11,239	5,088	4,343	3,958	3,509
39 West Virginia University	15,194	13,829	11,354	11,305	6,505	5,092	5,360	4,927
40 U PR Mayaguez	14,231	13,449	22,675i	24,824i	4,328	4,508	7,355i	9,459i
Total, 1st 40 insts.	1,432,207	1,335,241	1,295,954	1,241,589	394,322	360,833	335,002	301,094
41 U MD College Park	13,748	28,262	29,941	39,962	2,882	2,051	1,797	3,643e
42 University of Delaware	11,378	10,418	10,426	9,309	2,201	1,712	1,765	1,398
43 University of Wyoming	11,210	9,961	9,279	7,294	4,838	4,205	3,598	3,124
44 University Hawaii Manoa	10,122	10,464	10,523	10,191	2,184	1,638	1,591	1,616
45 U MA Amherst	9,190	8,857	8,544	--	1,954	1,959	1,649	--
46 U of Nevada Reno	8,378	5,095	7,223	4,207	1,721	749	1,660	300
47 U of Maine	8,185	7,643	6,574	9,149	1,619	1,471	1,339	1,531
48 Florida A&M University	8,183	8,354i	8,156	7,051	6,889	7,002i	6,907	6,037
49 South Dakota State U	8,180	8,245	7,902	7,250	2,979	2,575	2,663	2,492
50 U of Alaska Fairbanks	8,139i	6,466i	7,762	7,935	2,159i	2,203i	1,697	1,492
Total, 1st 50 insts.	1,528,920	1,439,006	1,402,284	1,343,937	423,748	386,398	359,668	322,727

See explanatory information and SOURCE at end of table.

Table B-60. Total and federally financed R&D expenditures in the agricultural sciences at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

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Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
51 Texas Tech University	8,041	7,913	8,456	7,836	1,660	1,248	1,378	811
52 University of Connecticut	7,648	6,980	7,265	8,780	1,179	1,106	909	1,469
53 University of Washington	7,154	7,547	7,035	12,074	4,974	4,640	4,263	7,545
54 University of Vermont	6,334	6,109	5,459	4,681	3,096	2,961	2,544	1,568
55 University of Montana	5,463	5,533	2,850	2,430	1,793	1,965	1,379	1,113
56 U of Rhode Island	4,915 i	4,818 i	5,411 i	5,223	374 i	370 i	289 i	272
57 Alabama A&M University	4,525	3,912	2,661	2,433	3,162	2,896	1,951	1,914
58 Sthrn IL U Carbondale	3,906	3,664	3,634	3,182	1,726	1,798	1,569	1,258
59 Tuskegee University	3,809	2,098	1,842	1,804e	3,794	2,077	1,813	1,747
60 Virginia State University	3,787	3,750	3,788	3,716	3,747	3,710	3,744	3,268
Total, 1st 60 insts.	1,584,502	1,491,330	1,450,685	1,396,096	449,253	409,169	379,507	343,692
61 Tennessee State U	3,695	2,665	2,227	1,781	2,904	2,665	2,227	1,781
62 U of New Hampshire	3,499	3,356	2,601	3,527	1,223	986	1,107	1,633e
63 Prairie View A&M U	3,492	2,893	3,164	2,527	3,165	2,679	3,030	2,429
64 Northern Arizona U	3,446	783	2,123	1,208	1,151	783e	650	278
65 SUNY Col Env Sci Frstry	3,252	3,129	2,642	1,634	445	394	301	76
66 NC A&T State University	3,126	3,040	3,435	3,181	2,858	2,800	3,015	2,928
67 U MD Biotechnology Inst	3,110	--	--	--	989	--	--	--
68 Lincoln University	2,787	2,647	2,881	2,602	2,576	2,415	2,538	2,339
69 Duke University	2,733	2,632	2,966	2,180	870	1,116	1,210	659
70 Kentucky State University	2,512	2,174	2,358	1,535 i	2,512	2,174	2,358	1,535 i
Total, 1st 70 insts.	1,616,154	1,514,649	1,475,082	1,416,271	467,946	425,181	395,943	357,350
71 Delaware State University	2,363	0	738	873	2,062	0	604	873
72 U Arkansas Pine Bluff	2,195	2,089	1,738	1,399	1,509	1,397	1,738	1,202
73 Alcorn State University	2,121	1,887	1,738	1,534	2,109	1,874	1,738	1,461
74 Langston University	2,046	1,881	1,750	1,310	1,929	1,570	1,446	1,310
75 Western Illinois U	1,939	2,164 i	1,668 i	1,288 i	1,541	1,626 i	1,278 i	971 i
76 Michigan Tech University	1,887	2,215 i	2,085	2,179	1,161	1,414 i	1,192	895
77 Stephen F Austin St U	1,807	1,359	1,355	923	334	269	292	282
78 Southern U A&M All Camp	1,783	2,346	2,075	3,645	1,782	1,949	1,873	2,508
79 U CA Santa Cruz	1,780	1,318	1,034	1,083	71	49	4	7
80 Georgia Institute of Tech	1,249	1,509	1,010	610	626	844	567	350
Total, 1st 80 insts.	1,635,324	1,531,417	1,490,273	1,431,115	481,070	436,173	406,675	367,209
81 Yale University	1,242	1,116	1,137	1,209	447	411	316	317
82 Arizona State University	1,183	225	185	158	85	53	95	65
83 U of the Virgin Islands	1,167	1,684	1,355 i	1,345 i	697	1,030	990 i	1,040 i
84 Brigham Young University	1,159	1,136	975	992	532	521	545	558
85 Clark Atlanta University	1,070	1,039	990	92	878	836	796	92
86 University of DC	1,058e	1,007 i	954 i	942	611e	576 i	539 i	533
87 U MD Eastern Shore	773	2,487	3,250	1,298	773	2,133	2,798	1,049
88 U MA Dartmouth	664	904	585	--	664	904	583	--
89 U of Pennsylvania	498	0	6	0	127	0	0	0
90 Illinois State University	436	216	92	163	226	147	16	42
Total, 1st 90 insts.	1,644,574	1,541,231	1,499,802	1,437,314	486,110	442,784	413,353	370,905
91 U WI Stevens Point	355	404	284	205	96	85	66	52
92 Fort Valley State College	328	124	0	0	328	124	0	0
93 U of Southwestern LA	298	317	259	213	27	17	4	14
94 University of Kansas	281	49	0	0	153	26	0	0
95 Louisiana Tech University	206 i	226	150 i	100 i	200 i	156	104 i	66 i
96 Tennessee Tech U	146	142	154	252	0	0	0	5
97 South Carolina State Col	115 i	104 i	88 i	56 i	115 i	104 i	88 i	56 i
98 University of Michigan	107	148	132	129	104	139	125	123
99 Sam Houston State U	89	50	37	54	77	43	28	37
100 East Texas State U	81	79	41	40	0	0	0	0
Total, 1st 100 insts.	1,646,580	1,542,874	1,500,947	1,438,363	487,210	443,478	413,768	371,258
Total, all other sampled insts.	646	15,212	11,353	20,069	267	6,218	3,973	6,023
Estimated total non-sampled insts.	15,429	0	0	0	7,586	0	0	0

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-61. Total and federally financed R&D expenditures in the biological sciences at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

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Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
Total, all institutions	3,759,343	3,534,872	3,303,218	3,063,548	2,459,306	2,309,496	2,136,919	1,950,008
1 Baylor Col of Medicine	90,336	86,442	84,799	77,138	60,164	57,104	55,140	47,587
2 University of Washington	89,824	85,386	62,627	56,042	77,961	72,981	55,943	50,190
3 Harvard University	82,766e	78,057	75,582	72,417	65,373	65,549	64,280	58,462
4 Texas A&M University	78,003	73,299	72,275	67,121	18,084	17,037	19,126	15,068
5 U WI Madison	73,922	66,151	65,329	58,766	40,487	35,629	35,055	31,321
6 Washington University	71,539	66,816	63,294	56,545	56,106	49,576	45,149	39,939
7 Yale University	67,073	64,733	61,965	55,776	52,049	50,540	47,825	46,081
8 University of Michigan	67,061	64,509	59,995	57,119	46,271	43,227	39,694	38,521
9 U of NC Chapel Hill	66,988	62,353	55,941	49,539	50,858	47,640	41,102	37,992
10 Johns Hopkins U	62,903	61,227	58,220	59,710	52,339	48,554	45,860	45,847
Total, 1st 10 insts	750,415	708,973	660,027	610,173	519,692	487,837	449,174	411,008
11 Rockefeller University	62,780	60,971	61,651	61,707	31,735	26,943	28,101	29,826
12 Case Western Reserve U	61,118	55,217	51,811	27,954	47,516	43,562	38,220	19,949
13 Columbia University	58,783	55,257	54,395	49,278	48,680	49,074	47,514	42,550
14 U of Pennsylvania	56,634	49,676	36,905	32,800	47,087	40,273	30,733	27,576
15 U TX MD Anderson Cncr	54,764	52,798	44,150	44,461	19,516	18,296	15,841	15,995
16 Tufts University	53,300	47,490e	41,983e	31,289	37,984	33,558	29,911	26,258
17 University of Georgia	51,250	48,993	47,642	43,676	27,915	27,949	26,841	23,513
18 U TX SW Med Ctr Dallas	47,086	48,994	44,187	40,843	31,840	31,591	28,470	27,876
19 Cornell University	46,479	43,045	43,089	47,919	27,604	25,505	23,364	24,303
20 Vanderbilt University	45,635	38,220	36,758	30,340	39,026	34,147	31,752	27,922
Total, 1st 20 insts.	1,288,244	1,209,634	1,122,598	1,020,440	878,595	818,735	749,921	676,776
21 University of Minnesota	41,984	44,563	38,860	40,172	26,376	26,412	25,256	24,208
22 U of Alabama Birmingham	41,754	45,018	38,067	33,194	31,006	31,493	26,618	22,673
23 U CA Berkeley	40,801	37,718	34,212	30,685	32,583	29,592	25,685	24,106
24 NC State U Raleigh	40,254	38,290	34,018	32,438	15,153	14,860	12,010	9,534
25 Purdue University	40,246	37,163	36,240	37,073	17,107	14,792	14,956	16,621
26 SUNY Buffalo	39,739	39,347	39,157	34,817	31,205	33,449	33,380	29,022
27 Ohio State University	39,337	35,365	35,477	33,657	23,113	20,651	20,664	18,312
28 U CA Irvine	38,919	36,480	30,455	29,489	31,610	29,056	23,859	23,271
29 Duke University	38,882	35,441	36,000	32,910	30,801	28,873	29,099	27,561
30 Pennsylvania State U	38,826	37,041	36,334	32,896	25,151	24,027	22,965	19,422
Total, 1st 30 insts.	1,688,986	1,596,060	1,481,418	1,357,771	1,142,700	1,071,940	984,413	891,506
31 U CA Davis	38,465	34,495	31,133	29,382	17,278	15,601	12,180	10,465
32 SUNY Albany	37,996	19,869	19,373	2,837	22,203	15,717	15,445	2,024
33 New York University	37,892	35,480	34,377	30,958	26,270	26,584	24,293	21,798
34 MA Institute of Tech	37,690	35,792	38,101	34,398	32,121	31,601	33,345	33,289
35 Rutgers the State U NJ	36,704	35,594	34,624	31,332	11,877	10,822	10,790	9,045
36 University of Cincinnati	36,703	36,636	34,847	31,538	24,489	25,719	25,030	22,083
37 U Med & Dent NJ	36,479	28,894	28,264	26,050e	16,053	13,523	13,160	11,216
38 Louisiana St U, All Camp	35,697	35,506	31,650	27,000	21,633	21,442	17,461	15,766
39 Northwestern University	33,790	32,257	32,319	30,591	24,356	24,566	23,344	20,792
40 University of Colorado	33,789	23,348	22,324	27,203	26,092	18,129	17,074	20,724
Total, 1st 40 insts.	2,054,191	1,913,931	1,788,430	1,629,060	1,365,072	1,275,644	1,176,535	1,058,708
41 SUNY Stony Brook	32,198	30,221	29,064	25,296	21,373	20,695	19,694	17,716
42 University of Kansas	32,062	29,044	25,060	22,331	13,911	12,696	11,525	10,352
43 University of Florida	32,061	24,506	23,846	23,319	18,000	16,076	14,725	14,497
44 University of Rochester	31,923	32,681	30,484	30,422	27,464	28,574	26,358	27,097
45 Michigan State University	31,796	34,609	23,111	21,640i	18,368	16,126	14,573	13,515i
46 University of Arizona	30,763	32,776	31,821	29,334	18,449	20,314	19,794	17,704
47 Iowa State University	30,341	33,355	27,103	25,977	11,122	12,269	7,425	6,154
48 Thomas Jefferson U	29,923	27,242	18,949	10,930	25,905	23,140	16,399	9,741
49 University of Virginia	27,812	24,839	22,787	20,757	22,036	18,819	17,012	15,290
50 Emory University	27,612	25,281	19,616	17,575	23,212	20,961	16,591	14,639
Total, 1st 50 insts	2,360,682	2,208,485	2,040,271	1,856,641	1,564,912	1,465,314	1,340,631	1,205,413

See explanatory information and SOURCE at end of table

Table B-61. Total and federally financed R&D expenditures in the biological sciences at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
51 Washington State U	27,397	27,065	25,944	23,841	12,571	12,628	11,747	11,175
52 University of Connecticut	26,651	26,696	25,706	28,044	14,077	15,140	13,281	14,066
53 Colorado State University	26,356	21,437	19,671	23,543	16,323	15,918	14,841	16,238
54 University of Chicago	26,304	26,240	30,780	29,095	22,823	23,135	25,725	25,083
55 University of Utah	26,219	24,737	25,383	20,691	22,007	20,980	20,102	16,886
56 California Inst of Tech	25,670	21,982	24,954	26,275	20,863	18,782	21,252	20,485
57 Yeshiva University	24,150	23,305	22,671	22,547	18,387	18,644	17,720	17,635
58 Indiana University	24,146	22,635	20,054	17,420	15,152	14,469	13,182	11,637
59 U of Iowa	24,058	23,652	22,193	23,314	17,503	17,720	16,577	16,084
60 Virginia Commonwealth U	23,983	25,135	22,424	20,700	17,891	18,116	16,637	15,582
Total, 1st 60 insts.	2,615,616	2,451,369	2,280,051	2,092,111	1,742,509	1,640,846	1,511,695	1,370,284
61 University of IL Chicago	23,302	22,229	21,096	19,809	14,056	12,287	12,217	12,448
62 U of Missouri Columbia	22,941	27,773	22,783	22,635	8,213	10,297	9,356	9,299
63 U TX Hlth Sci Ctr San Ant	22,576	20,739	20,445	17,628	20,140	18,501	15,326	12,489
64 University of IL Urbana	22,280	21,275	21,637	21,210	16,151	15,274	14,455	13,908
65 U of NE Med Ctr Omaha	21,446e	19,797	20,737	17,875	8,428	6,497	6,311	6,683
66 Temple University	21,237	18,955	17,270	23,858	10,181	10,482	9,701	13,252
67 U of Tennessee System	20,864	19,434	18,037	18,571	15,790	14,020	12,704	12,784
68 U MA Worcester	19,398	19,364	22,424	—	17,088	16,227	16,746	—
69 CUNY Mt Sinai Sch Med	18,811	17,195	16,703	15,892	16,115	14,411	14,521	12,972
70 U CA Los Angeles	18,791	19,356	19,015	17,422	14,446	15,208	14,712	13,144
Total, 1st 70 insts.	2,827,262	2,657,486	2,480,198	2,267,011	1,883,117	1,774,050	1,637,744	1,477,263
71 Oregon State University	18,582	19,850	18,082	15,974	8,945	9,545	8,538	6,976
72 U TX Hlth Sci Ctr Houston	18,432	14,302	13,632	15,871	14,828	11,482	11,212	10,681
73 University of Vermont	17,617	17,920	17,001	16,393	13,933	13,235	12,673	12,692
74 U MD Baltimore Prof Sch	16,630	16,766	15,047	15,025e	8,959	8,033	7,213	6,552
75 Princeton University	16,239	15,481	16,684	18,513	10,058	9,083	11,044	10,891
76 Brandeis University	15,807	16,766	16,177	15,608	11,385	12,203	11,592	11,542i
77 University of Oklahoma	15,789	15,057	13,012	11,273	7,391	6,853	5,547	4,363
78 U TX Austin	15,323	13,032	12,044	12,754	10,662	8,595	7,762	7,532
79 Loyola U of Chicago	15,218	6,180	7,266	5,572	9,608	3,457	3,491	2,914
80 University of Miami	15,140	16,285	15,212	15,525	12,448	13,831	13,272	13,298
Total, 1st 80 insts.	2,992,039	2,809,125	2,624,355	2,409,519	1,991,334	1,870,367	1,730,088	1,564,704
81 The Medical Col of PA	15,093	14,152	14,062	12,151	10,150	10,739	10,045	8,671
82 Oregon Health Sciences U	15,026	14,622i	12,657i	10,758i	11,685	11,474i	9,892i	8,520i
83 Medical Col of Georgia	14,949	15,839	12,067	6,621	6,135	6,404	5,560	5,805
84 University of New Mexico	14,642	13,650	12,763	16,384	10,024	8,864	8,298	6,534
85 Georgetown University	14,318	15,521	14,553	13,207	11,133	11,953	11,519	10,776
86 U CA San Diego	13,903	13,701	13,110	12,013	12,705	12,315	12,078	10,759
87 Kansas State University	12,128	10,762	8,338	7,274	5,538	5,020	3,789	2,793
88 Stanford University	11,623	10,030	9,941	8,956	9,985	8,362	6,924	6,587
89 Medical Col of Wisconsin	11,409	16,067	12,638	11,729	7,236	10,316	8,024	7,268
90 Med U of South Carolina	11,355	12,866	11,037	9,745	7,790	6,871	7,070	6,261
Total, 1st 90 insts.	3,126,485	2,946,335	2,745,521	2,518,357	2,083,715	1,962,685	1,813,287	1,638,678
91 Oklahoma State University	11,177	9,228	11,078	9,349	3,303	2,989	3,427	2,771
92 U MD College Park	10,872	31,184	29,017	30,936	4,958	5,009	4,197	5,624e
93 U of Nebraska Lincoln	10,713	12,824	5,673	5,681	2,937	2,984	1,060	554
94 University Hawaii Manoa	10,385	10,123	9,346	8,715	5,910	5,684	4,495	3,671
95 U of Alaska Fairbanks	9,914i	8,331i	9,118	8,973	4,106i	4,191i	3,230	3,863
96 Unif Svcs U of Hlth Sci	9,702	6,977	7,445i	6,685i	6,530	5,048	6,231i	5,637i
97 New York Medical College	9,571	11,789i	10,755	9,218	7,773	8,786i	8,520	7,300
98 Auburn University	9,442	7,909	7,646	7,743	2,410	1,959	1,337	1,013
99 University of Oregon	9,214	9,865	8,984	7,061	7,218	7,755	6,970	5,871
100 Med Col of Ohio Toledo	9,212	8,259	7,096	6,336	7,674	6,430	5,512	4,664
Total, 1st 100 insts.	3,226,687	3,062,824	2,851,679	2,619,054	2,136,534	2,013,520	1,858,266	1,679,646
Total, all other sampled insts.	478,551	472,048	451,539	444,494	296,504	295,976	278,653	270,362
Estimated total non-sampled insts.	54,105	0	0	0	26,268	0	0	0

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
— = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-62. Total and federally financed R&D expenditures in the medical sciences at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

Page 1 of 2

Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
Total, all institutions	5,633,792	5,323,726	4,963,708	4,546,403	3,531,413	3,369,501	3,113,366	2,848,670
1 U CA San Francisco	312,393	314,599	295,784	268,700	213,252	210,148	202,283	190,936
2 Johns Hopkins U	163,372	147,233	131,339	127,022	134,325	121,895	108,987	105,005
3 U CA Los Angeles	155,395	156,060	148,278	136,264	103,284	104,672	96,756	90,024
4 University of Pittsburgh	148,850	140,602	100,885	79,439	120,495	114,126	81,203	64,506
5 U CA San Diego	142,821	139,794	128,869	117,698	117,976	113,701	104,479	94,433
6 Stanford University	140,159	131,734	145,394	129,184	114,002	104,675	100,289	95,793
7 Duke University	129,216	118,024	110,685	96,758	76,756	69,746	65,778	62,870
8 University of Michigan	123,029	123,114	119,825	118,472	77,659	74,442	69,515	69,814
9 U of Pennsylvania	120,609	117,363	121,410	111,181	89,962	86,023	84,302	79,448
10 U WI Madison	118,871	114,432	107,226	101,919	63,195	61,306	57,132	54,753
Total, 1st 10 insts.	1,554,715	1,502,955	1,409,695	1,286,637	1,110,906	1,060,734	970,724	907,582
11 Yale University	118,460	115,142	104,688	96,542	86,953	85,118	77,825	73,061
12 University of Minnesota	116,123	126,164	130,983	103,342	76,862	76,825	73,889	48,882
13 University of Washington	107,389	107,340	107,541	82,930	83,175	83,030	84,810	66,007
14 U of Southern California	101,676	89,936	90,762	82,874	62,714	59,388	56,295	54,149
15 Baylor Col of Medicine	96,529	85,810	83,199	83,946	32,240	30,519	30,594	31,165
16 Cornell University	94,636	89,522	83,599	79,189	61,148	57,859	53,489	50,727
17 Washington University	93,906	88,023	83,523	82,399	62,363	61,646	61,727	58,048
18 U of Alabama Birmingham	90,936	79,622	72,389	72,103	64,416	59,854	53,454	51,306
19 U MD Baltimore Prof Sch	88,693	89,418	80,250	80,130e	47,782	42,845	38,471	34,946
20 Columbia University	88,466	76,947	72,375	69,554	74,454	67,032	61,390	56,774
Total, 1st 20 insts.	2,551,529	2,450,879	2,319,004	2,119,646	1,763,013	1,684,850	1,562,668	1,432,647
21 U of Iowa	88,214	82,494	71,676	62,116	57,124	52,666	47,133	42,729
22 Harvard University	85,326e	81,634	81,659	71,817	56,803	57,460	55,484	47,310
23 Emory University	73,221	61,167	51,101	50,005	43,559	36,484	30,724	26,090
24 U TX Med Br Galveston	72,503	67,852	23,928	20,511	32,775	30,555	11,521	9,759
25 U TX SW Med Ctr Dallas	71,312	65,264	58,076	53,668	39,628	36,352	33,029	29,870
26 U of NC Chapel Hill	69,892	61,657	54,404	47,137	54,591	46,863	41,502	38,443
27 University of Miami	68,779	67,274	56,568	55,240	45,802	44,321	40,418	34,790
28 University of Colorado	66,514	63,634	58,479	44,204	50,855	49,265	44,468	33,502
29 CUNY Mt Sinai Sch Med	67,368	58,142	58,858	50,418	39,073	35,389	36,332	29,063
30 Wayne State University	63,154	56,654	50,787	44,086	32,296	29,433	25,821	22,716
Total, 1st 30 insts.	3,279,812	3,116,651	2,884,540	2,618,848	2,215,519	2,103,638	1,929,100	1,746,919
31 U TX MD Anderson Cncr	62,385	69,200	61,723	57,861	20,056	19,769	15,720	13,341
32 U CA Davis	61,655	59,920	58,474	56,092	41,766	40,897	38,842	37,211
33 U TX Hlth Sci Ctr San Ant	60,959	54,500	44,734	34,140	31,531	29,966	25,722	20,281
34 Boston University	59,025	59,123	53,937	49,305	47,341	47,397	44,232	40,693
35 Georgetown University	58,121	47,836	40,325	37,168	36,810	29,178	23,816	23,181
36 Indiana University	54,209	49,958	47,243	43,325	33,172	30,588	27,409	23,270
37 U of South Florida	54,116	49,067	40,481	42,661	6,752	7,055	6,965	6,983
38 University of IL Chicago	53,832	48,497	44,637	39,371	27,311	24,471	22,269	18,314
39 University of Rochester	52,017	52,082	52,490	53,386	35,286	36,860	37,367	40,649
40 University of Chicago	51,534	45,345	47,513	47,358	42,330	37,307	38,761	38,066
Total, 1st 40 insts.	3,847,665	3,652,179	3,376,097	3,079,515	2,537,874	2,407,126	2,210,203	2,008,908
41 New York University	51,132	48,600	44,960	41,624	31,517	33,420	32,600	30,139
42 Wake Forest University	50,810	56,171	48,405	42,316	35,607	41,065	36,725	32,318
43 U Med & Dent NJ	50,387	47,516	56,241	54,737e	24,634	22,001	25,932	27,552
44 Northwestern University	50,318	39,300	35,054	39,288	20,412	15,981	13,315	13,538
45 Yeshiva University	48,298	46,610	45,342	45,096	36,773	37,288	35,439	35,273
46 University of Virginia	47,691	41,246	37,474	29,919	24,685	22,336	19,466	16,470
47 SUNY Buffalo	46,503	38,666	35,465	32,501	26,911	24,021	22,334	20,685
48 University of Arizona	44,804	40,191	37,778	36,765	27,206	24,443	23,377	21,360
49 Virginia Commonwealth U	44,668	44,896	40,892	39,516	26,412	27,292	26,117	26,536
50 Ohio State University	44,421	43,904	35,416	29,020	23,915	24,687	20,573	15,990
Total, 1st 50 insts.	4,326,697	4,099,279	3,793,124	3,470,297	2,815,946	2,679,660	2,466,081	2,248,769

See explanatory information and SOURCE at end of table.

Table B-62. Total and federally financed R&D expenditures in the medical sciences at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

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Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
51 U TX Hlth Sci Ctr Houston	43,636	41,632	38,510	34,705	30,577	26,293	24,023	20,824
52 University of Kentucky	41,724	34,709	30,258	25,025	26,057	21,010	17,600	15,280
53 Dartmouth College	41,670	44,908	41,706	34,597	30,331	33,369	30,627	26,817
54 University of Florida	41,306	35,991	34,611	31,984	20,263	18,344	17,146	15,241
55 Oregon Health Sciences U	40,815	38,109i	33,082i	27,857i	24,799	24,063i	20,744i	17,868i
56 University of Connecticut	40,629	42,778	39,312	37,915	18,672	19,742	19,343	18,522
57 Medical Col of Wisconsin	38,195	32,622	30,941	28,717	24,223	20,945	19,644	17,794
58 Case Western Reserve U	36,782	34,210	30,553	43,933	28,158	26,310	24,191	35,763
59 University of Utah	36,078	38,272	41,530	37,118	27,188	30,100	30,457	26,673
60 U CA Berkeley	34,104	28,820	37,507	25,889	9,911	8,464	8,563	7,479
Total, 1st 60 insts	4,721,636	4,471,330	4,151,134	3,798,037	3,056,125	2,908,300	2,678,419	2,451,030
61 U CA Irvine	31,183	30,406	29,447	25,930	10,532	11,609	9,493	9,019
62 Vanderbilt University	30,526	29,558	32,650	28,872	26,138	26,467	26,042	26,485
63 University of Cincinnati	28,766	28,270	27,379	23,169	15,217	14,800	14,566	12,076
64 Tulane University	28,169	28,131	22,810	27,150	11,494	12,328	9,488	14,047
65 Med U of South Carolina	27,667	25,963	20,756	15,920	14,020	11,355	10,086	8,106
66 Thomas Jefferson U	26,557	23,456	22,222	20,636	16,861	14,770	12,335	11,860
67 SUNY Stony Brook	24,535	26,424	22,419	18,363	15,690	15,257	13,498	11,050
68 U of Tennessee System	23,947	24,091	21,253	19,715	12,691	12,223	11,301	10,394
69 U of Missouri Columbia	22,772	16,319	17,447	17,618	6,223	4,703	5,206	6,087
70 U MA Worcester	22,740	21,719	30,918	-	16,419	16,258	18,667	-
Total, 1st 70 insts	4,988,498	4,725,667	4,398,435	3,995,410	3,201,410	3,048,070	2,809,101	2,560,154
71 Rush University	22,009	21,686	17,990	19,323	4,520	5,908	3,826	3,300
72 University of Vermont	20,808	19,867	21,256	19,389	13,489	12,926	15,135	13,487
73 SUNY Hlth Sci Ctr Brklyn	19,856	19,140	16,378	23,923	11,871	12,431	10,559	11,940
74 University of Oklahoma	18,684	17,033	19,416	20,900	6,805	5,843	4,888	6,070
75 Temple University	18,589	17,336	16,791	15,021	8,398	6,608	6,777	7,273
76 University of Kansas	18,302	15,332	14,042	12,433	8,002	7,671	6,681	4,523
77 U PR Med Sci Campus	17,765	14,622	18,296	11,014	11,973	9,775	14,619	8,610
78 Unif Svcs U of Hlth Sci	17,632	23,869	20,430i	18,219i	11,594	17,271	14,146i	12,799i
79 Pennsylvania State U	17,589	16,141	16,620	15,463	9,843	11,247	11,559	11,389
80 Louisiana St U, All Camp	16,551	15,947	18,066	14,713	8,924	8,271	9,443	9,850
Total, 1st 80 insts	5,176,283	4,906,640	4,577,720	4,165,808	3,296,829	3,146,021	2,906,734	2,649,395
81 University of Georgia	15,931	14,517	13,740	15,039	2,916	2,656	2,305	2,683
82 Brown University	15,917	15,830	15,307	13,650	11,012	11,241	10,563	10,243
83 The Medical Col of PA	15,380	10,844	11,773	12,494	5,980	6,251	7,869	6,289
84 U Arkansas Medical Sci	14,705	9,622	9,758	9,405	8,216	6,706	5,622	4,887
85 Rutgers the State U NJ	14,275	13,123	10,525	8,446	6,956	5,979	4,991	3,998
86 Michigan State University	14,213	15,360	8,518	7,976i	7,201	7,157	3,881	3,600i
87 Loyola U of Chicago	13,976	14,581	16,844	12,917	9,754	9,091	10,232	8,540
88 U of South Carolina	13,398	8,764	8,366	9,744	6,064	4,339	3,806	5,152
89 Medical Col of Georgia	12,810	8,866	8,934	4,701	2,986	1,309	2,155	2,228
90 U of NE Med Ctr Omaha	12,551	11,872	10,827	9,983	3,828	3,634	3,429	3,835
Total, 1st 90 insts	5,319,439	5,030,019	4,692,312	4,270,163	3,361,742	3,204,384	2,961,587	2,700,850
91 Med Col Hampton Roads	12,342	11,208	9,302	9,198e	7,683	7,224	5,663	5,766e
92 George Washington U	10,771	10,328	11,768	12,318	6,397	6,619	9,183	9,676
93 Iowa State University	10,723	6,195	6,937	5,698	1,350	1,093	1,134	621
94 Purdue University	10,505	10,737	8,822	8,115	6,198	7,301	5,784	5,749
95 St Louis University	10,400	10,120	10,012	9,424	8,602	8,707	8,320	7,453
96 Med Col PA Hahnemann U	10,288	5,092	5,231	9,812	6,954	1,688	3,379	5,403
97 U Mississippi, All Camp	9,478	9,262	8,154	8,102	4,257	3,588	3,809	3,763
98 C R Drew U of Med & Sci	9,347	6,852	7,862	7,043	7,674	6,483	5,949	5,311
99 University of New Mexico	9,253	8,607	7,685	9,640	5,143	4,563	4,092	4,556
100 New York Medical College	9,154	6,702i	6,044	5,415	7,140	4,682i	4,541	3,756
Total, 1st 100 insts	5,421,700	5,115,122	4,774,129	4,354,928	3,423,140	3,256,332	3,013,441	2,752,904
Total, all other sampled insts	209,409	208,604	189,579	191,475	106,842	113,169	99,925	95,766
Estimated total non sampled insts	2,683	0	0	0	1,431	0	0	0

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-63. Total and federally financed R&D expenditures in psychology at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

Page 1 of 2

Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
Total, all institutions	358,548	349,695	328,491	283,140	242,547	234,382	214,900	186,280
1 U WI Madison	11,540	10,749	10,389	9,469	8,870	8,718	8,510	7,452
2 University of Michigan	9,098	11,952	11,439	6,960	5,039	7,807	7,296	3,391
3 MA Institute of Tech	8,503	8,043	8,018	7,481	7,398	7,313	4,000	6,720
4 U CA Los Angeles	7,514	7,435	8,225	7,142	5,731	5,597	5,668	5,199
5 University of Connecticut	7,440	7,241	5,754	4,831	2,979	3,038	2,781	2,406
6 University of Colorado	7,423	8,006	6,752	5,948	5,004	5,361	4,501	3,999
7 University of Washington	7,321	6,778	6,315	5,256	6,931	6,309	5,878	4,543
8 Yale University	7,207	6,298	4,672	3,710	2,660	2,190	1,866	1,705
9 University of Minnesota	6,970	7,548	6,341	7,622	5,922	6,037	4,918	4,992
10 Rutgers the State U NJ	6,830	6,927	7,029	5,894	2,833	3,003	3,017	2,522
Total, 1st 10 insts.	79,846	80,977	74,934	64,313	53,367	55,373	48,435	42,929
11 U CA Berkeley	6,617	6,870	7,088	6,548	4,455	4,465	4,029	4,195
12 Pennsylvania State U	6,393	5,745	6,302	5,768	3,458	2,631	3,463	3,319
13 University of IL Urbana	6,305	6,088	6,289	5,970	4,528	4,015	3,708	3,557
14 Princeton University	6,281	5,462	5,853	5,238	4,087	3,174	3,237	2,518
15 Duke University	6,105	5,202	4,538	2,131	5,226	4,964	4,409	2,074
16 University of Georgia	6,004	4,310	4,237	3,526	2,589	1,658	1,502	1,090
17 University of Rochester	6,001	6,682	5,812	5,062	2,850	3,097	2,979	2,457
18 Carnegie Mellon U	5,625	4,918	4,682	4,232	3,778	3,429	3,325	3,166
19 SUNY Buffalo	5,607	5,051	4,182	3,681	1,659	1,181	1,327	1,335
20 U of South Florida	5,390	4,342	3,242	1,783	1,838	1,445	1,255	545
Total, 1st 20 insts.	140,174	135,647	127,159	108,252	87,835	85,432	77,669	67,185
21 Indiana University	5,248	4,704	3,907	3,566	4,182	3,500	2,983	2,605
22 New York University	4,686	7,017	3,787	3,458	4,091	6,640	3,217	3,078
23 Temple University	4,416	4,906	5,720	2,874	3,475	3,867	3,464	1,749
24 SUNY Albany	4,039	3,765	3,123	2,947	2,983	3,077	2,430	2,128
25 U CA San Diego	3,998	3,545	2,914	2,965	3,231	2,566	2,168	2,163
26 U TX Austin	3,961	3,364	2,765	2,608	3,265	2,651	2,197	1,987
27 U MD College Park	3,799	2,367	3,494	3,339	1,097	313	1,237	1,125
28 Stanford University	3,710	3,559	3,698	3,599	3,182	3,068	2,633	2,703
29 Cornell University	3,670	3,321	3,570	3,514	1,585	1,483	1,568	1,558
30 U of Rhode Island	3,450i	3,404i	2,798i	2,646	3,073i	3,034i	2,371i	2,232
Total, 1st 30 insts.	181,151	175,599	162,935	139,768	117,999	115,631	101,937	88,513
31 Memphis State University	3,441	2,904	3,153	2,716	1,615	1,216	1,048	665
32 Rush University	3,432	4,142	2,184	2,018	1,421	1,584	935	836
33 SUNY Binghamton	3,318	3,425	2,715	2,225	1,363	1,675	1,218	766
34 University of Oklahoma	3,307	2,803	2,958	2,536	1,934	833	506	135
35 San Diego St University	3,282	2,902	3,206	2,181	2,536	2,086	2,643	2,046
36 Harvard University	3,117e	3,251	3,609	2,302	2,322	2,613	2,418	1,652
37 University of Virginia	3,084	2,823	2,655	2,534	2,512	2,151	2,194	2,207
38 SUNY Stony Brook	3,026	2,900	2,069	1,793	2,413	2,438	1,752	1,428
39 Oregon Health Sciences U	3,004	1,882i	1,629i	1,389i	2,649	1,551i	1,338i	1,153i
40 Georgia State University	2,998	2,969	2,521	2,267	1,807	1,681	805	865
Total, 1st 40 insts.	213,160	205,600	189,636	161,729	138,571	133,459	116,794	100,266
41 Vanderbilt University	2,980	2,021	1,844	1,898	2,387	1,643	1,387	1,489
42 University of Houston	2,973	2,865	2,353	2,167	2,209	2,142	1,720	1,620
43 Arizona State University	2,928	3,432	2,947	2,556	2,027	2,492	2,056	1,780
44 Florida State University	2,925	2,233	2,151	2,361	1,408	1,244	1,098	1,301
45 University of Florida	2,876	2,564	2,152	1,493	1,445	1,206	928	834
46 U CA Santa Barbara	2,852	3,155	2,861	2,690	2,142	2,479	2,147	1,931
47 U of NC Chapel Hill	2,727	2,441	2,235	1,245	2,356	2,305	1,924	1,134
48 U MA Amherst	2,547	2,637	2,916	--	2,054	2,131	2,378	--
49 University of Arizona	2,546	2,122	1,978	2,263	1,072	834	899	1,253
50 U of Southern California	2,446	2,330	10,191	9,776	2,136	2,021	8,252	6,753
Total, 1st 50 insts.	240,960	231,400	221,264	188,178	157,807	151,956	139,583	118,361

See explanatory information and SOURCE at end of table

Table B-63. Total and federally financed R&D expenditures in psychology at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

Page 2 of 2

Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
51 Columbia University	2,386	2,173	1,938	1,653	2,287	2,173	1,938	1,536
52 University of Pittsburgh	2,378	2,210	2,280	2,236	2,219	2,100	2,092	1,811
53 Purdue University	2,368	2,301	1,908	1,394	1,528	1,499	1,363	978
54 U of Missouri Columbia	2,341	1,128	1,337	1,211	944	638	648	754
55 Michigan State University	2,303	3,598	3,293	3,081i	1,603	1,676	1,996	1,851i
56 U of Pennsylvania	2,296	2,161	1,987	1,516	2,134	2,035	1,928	1,467
57 Wayne State University	2,221	1,872	1,876	1,189	1,470	1,420	1,341	822
58 Colorado State University	2,111	2,141	2,725	2,476	1,934	1,937	2,513	2,123
59 VA Polytech Inst & St U	2,031	1,662	1,463	1,253	1,248	738	884	730
60 University of Oregon	2,017	2,007	2,174	2,043	1,322	1,376	1,370	1,380
Total, 1st 60 insts.	263,412	252,653	242,245	206,230	174,496	167,548	155,656	131,813
61 University of New Mexico	2,001	2,083	1,537	897	1,480	1,747	1,172	730
62 University of Dayton	1,949	1,304	1,041	885	1,926	1,257	1,010	872
63 Texas Christian U	1,943	2,211	2,236	1,731	1,888	2,202	2,233	1,727
64 Northwestern University	1,713	1,867	1,536	1,191	1,539	1,538	1,214	916
65 University of Miami	1,679	999	1,186	1,102	1,488	857	967	1,029
66 University of IL Chicago	1,671	2,082	1,757	977	1,104	1,602	1,348	729
67 Utah State University	1,664	1,706	1,763	1,460	1,327	1,349	1,524	1,154
68 Tufts University	1,650	1,089e	940e	781	1,172	845	712	723
69 Brown University	1,607	2,111	1,518	1,502	1,033	1,430	1,034	1,123
70 Brandeis University	1,578	1,385	1,453	1,345	1,336	1,163	1,167	1,178
Total, 1st 70 insts.	280,867	269,490	257,212	218,101	188,789	181,538	168,037	141,994
71 University of Denver	1,575	2,624	2,925	2,319	1,556	2,329	2,665	2,319i
72 Texas A&M University	1,570	1,407	1,501	756	710	736	625	482
73 Ohio State University	1,517	1,118	1,004	558	1,076	610	696	305
74 Georgia Institute of Tech	1,473	1,492	1,463	1,281	738	835	822	735
75 U CA Davis	1,415	913	677	800	1,298	827	636	720
76 Emory University	1,399	989	926	720	1,130	729	649	587
77 University of Kansas	1,386	1,779	1,437	1,421	851	1,048	770	745
78 Virginia Commonwealth U	1,361	996	550	425	700	560	418	337
79 U of South Carolina	1,309	1,518	2,025	1,898	959	1,023	1,447	1,252
80 University of Chicago	1,306	1,192	1,539	1,697	852	861	1,005	960
Total, 1st 80 insts.	295,178	283,518	271,259	229,976	198,659	191,096	177,770	150,436
81 CA Sch Prof Psy Fresno	1,279	616e	875	661	452	74e	252	208
82 Kent State University	1,204	1,526	1,306	932	674	966	1,013	688
83 Florida Atlantic U	1,194	1,231	1,268	1,049	1,026	1,161	1,229	977
84 Howard University	1,162	613	447	238	838	576	446	204
85 CUNY Hunter College	1,047	1,018	686	903	596	646	504	733
86 U CA Riverside	1,044	753	774	602	967	668	621	380
87 University of Utah	1,033	1,346	1,172	1,035	771	1,020	936	940
88 Johns Hopkins U	1,021	844	1,047	1,243	949	783	873	948
89 U of Iowa	1,014	1,066	1,051	1,141	627	652	564	707
90 Dartmouth College	992	326	400	347	992	277	307	218
Total, 1st 90 insts.	306,168	292,857	280,285	238,127	206,551	197,919	184,515	156,439
91 U of Nebraska Lincoln	981	578	725	315	408	375	363	218
92 Syracuse University	975	1,330	786	472	468	778	523	366
93 Northeastern University	941	995	904	701	922	949	756	506i
94 Morris Brown College	912	1,127	344i	125	912	1,127	344i	125
95 De Paul University	907	1,166	703	534	552	725	513	425
96 U of Alabama Birmingham	832	936	887	753	700	708	627	536
97 Washington University	822	736	554	735	817	666	483	493
98 Barnard College	803	894	673	400	743	694	587	357
99 Tulane University	800	1,306	712	473	218	212	242	211
100 University of Vermont	787	703	879	1,137	430	370	590e	805
Total, 1st 100 insts.	314,928	302,628	287,452	243,772	212,721	204,523	189,543	160,481
Total, all other sampled insts.	35,572	47,067	41,039	39,368	22,713	29,859	25,357	25,799
Estimated total non-sampled insts.	8,048	0	0	0	7,113	0	0	0

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
= not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

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Table B-64. R&D expenditures in the social sciences at universities and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

Page 1 of 2

Institution and ranking	1994	1993	1992	1991	1994, by subfield			
					Economics	Political science	Sociology	Other
Total, all institutions	951,112	896,337	815,339	749,941	241,379	165,499	195,769	348,465
1 University of Michigan	51,094	52,042	44,451	41,259	11,849	5,644	11,702	21,899
2 Harvard University	46,480e	41,102	43,787	39,711	12,975e	26,317e	624e	6,564e
3 U MD College Park	31,490	22,038	14,953	6,549	13,169	4,974	2,610	10,737
4 U WI Madison	31,028	28,580	25,441	22,608	11,472	1,714	7,890	9,952
5 U CA Berkeley	24,830	20,842	19,053	19,894	114	10,955	8,391	5,370
6 University of Georgia	22,232	20,782	20,118	19,821	9,000	1,627	1,305	10,300
7 U of Pennsylvania	21,291	17,192	17,563	13,484	4,975	825	4,661	10,830
8 U CA Los Angeles	18,307	17,739	17,043	16,442	496	245	880	16,686
9 U of NC Chapel Hill	18,214	14,950	13,924	11,290	27	0	7,314	10,873
10 Rutgers the State U NJ	18,051	18,600	15,609	14,438	843	7,755	3,667	5,786
Total, 1st 10 insts	283,017	253,867	231,942	205,496	64,920	60,056	49,044	108,997
11 Texas A&M University	17,547	12,430	12,224	8,852	9,979	1,849	4,335	1,384
12 Ohio State University	16,218	19,935	16,422	19,640	5,676	2,026	787	7,729
13 U TX Austin	16,183	15,473	12,890	19,674	4,978	3,075	4,117	4,013
14 University of IL Urbana	14,096	12,909	11,241	10,962	4,328	3,905	164	5,699
15 Duke University	13,576	10,168	8,192	6,392	1,694	3,748	5,211	2,923
16 Brandeis University	12,582	13,595	13,173	12,377	262	222	11,259	839
17 Washington State U	11,987	11,384	8,892	8,293	7,339	344	2,725	1,579
18 University of Minnesota	11,852	12,121	14,000	12,188	5,898	2,056	1,558	2,340
19 University of Washington	10,675	9,834	8,115	6,942	220	2,478	835	7,142
20 Purdue University	10,616	7,002	6,065	5,883	7,673	97	2,205	641
Total, 1st 20 insts	418,349	378,718	343,156	316,699	112,967	79,856	82,240	143,286
21 Iowa State University	10,438	11,636	9,046	8,619	3,849	337	6,137	115
22 Pennsylvania State U	10,409	10,551	9,934	11,274	3,285	935	5,402	787
23 University of Oklahoma	10,173	10,445	11,593	8,733	1,241	1,208	161	7,563
24 Princeton University	10,099	9,137	9,708	9,562	1,755	6,317	1,139	888
25 Cornell University	9,958	10,425	10,923	11,865	4,199	48	1,284	4,427
26 Johns Hopkins U	9,784	9,050	8,294	10,425	1,947	0	3,627	4,210
27 Temple University	9,546	10,373	10,325	9,768	250	108	8,388	800
28 Michigan State University	9,353	11,771	7,420	6,948	4,550	2,541	1,116	1,146
29 University of Arizona	8,666	8,685	8,492	8,271	4,227	126	2,111	2,202
30 U of Missouri Columbia	8,424	7,658	6,538	6,481	6,030	333	1,526	535
Total, 1st 30 insts	515,199	478,449	435,429	408,645	144,300	91,809	113,131	165,959
31 University of Pittsburgh	8,421	6,836	4,014	3,700	327	172	198	7,724
32 Tulane University	8,401	6,292	7,855	7,527	2	47	171	8,191
33 University of Connecticut	8,379	8,549	6,344	4,759	3,307	322	1,487	3,263
34 MA Institute of Tech	8,179	8,540	6,467	3,461	2,741	1,644	0	3,794
35 Arizona State University	7,551	8,163	7,702	7,489	1,344	1,589	254	4,364
36 U of South Carolina	7,446	5,942	5,653	5,672	1,306	1,067	1,647	3,426
37 Emory University	7,413	6,325	4,215	2,749	9	6,215	457	732
38 George Washington U	7,226	9,119	7,025	442	30	4,592	15	2,589
39 Georgia Institute of Tech	7,060	7,632	7,736	8,491	6,497	178	189	196
40 University of Miami	6,652	9,869	7,933	2,451	0	0	571	6,081
Total, 1st 40 insts	591,927	555,716	500,373	455,386	159,863	107,635	118,120	206,309
41 U MA Boston	6,630	6,459	5,271	--	17	1,203	1,405	4,005
42 U CA Santa Barbara	6,462	6,366	6,121	4,945	42	63	86	6,271
43 SUNY Albany	6,304	3,743	3,277	3,696	186	1,548	3,539	1,031
44 Clemson University	5,861	6,636	5,575	5,763	2,986	1,235	175	1,465
45 New York University	5,836	6,936	6,979	5,024	1,810	2,638	269	1,119
46 Columbia University	5,668	4,998	4,989	5,381	385	583	4,700	0
47 U of Southern California	5,530	7,237	5,570	4,599	137	476	3,863	1,054
48 Louisiana St U, All Camp	5,440	5,803	5,515	5,083	2,941	423	690	1,386
49 Indiana University	5,275	4,785	4,588	3,955	1,622	610	870	2,173
50 U WI Milwaukee	5,235	4,973	4,889	3,887	1,062	459	331	3,383
Total, 1st 50 insts	650,168	613,652	553,147	497,719	171,051	116,873	134,048	228,196

See explanatory information and SOURCE at end of table.

Table B-64. R&D expenditures in the social sciences at universities and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

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Institution and ranking	1994	1993	1992	1991	1994, by subfield			
					Economics	Political science	Sociology	Other
51 U of Iowa	5,233	4,682	3,851	4,139	511	1,091	1,219	2,412
52 University of New Mexico	5,174	4,903	7,829	5,443	127	909	1,034	3,104
53 U of Tennessee System	5,083	4,277	4,233	4,366	3,489	819	663	112
54 Stanford University	5,066	4,606	5,195	3,977	736	102	580	3,648
55 Carnegie Mellon U	5,053	5,531	4,986	4,276	2,598	1,259	0	1,196
56 University of Florida	4,983	2,950	3,636	4,507	1,178	645	1,261	1,899
57 VA Polytech Inst & St U	4,950	5,066	3,831	4,956	1,830	693	85	2,342
58 Cleveland State U	4,458	3,660	4,565	4,310	0	0	140	4,318
59 U CA Irvine	4,397	4,821	4,286	3,923	13	1,822	163	2,399
60 Northern Illinois U	4,210	3,313	3,044	3,379	140	2,681	573	816
Total, 1st 60 insts.	698,775	657,461	598,603	540,995	181,673	126,894	139,766	250,442
61 Oklahoma State University	4,123	5,084	6,634	7,968	3,261	33	199	630
62 U CA San Diego	4,115	3,102	2,345	2,168	514	2,082	263	1,256
63 Florida State University	4,082	3,092	4,251	6,537	341	251	1,369	2,121
64 University of Virginia	4,058	4,222	4,052	4,850	226	3,559	159	114
65 Colorado State University	4,011	3,994	3,693	6,388	869	0	212	2,930
66 SUNY Buffalo	4,009	3,333	3,808	4,168	0	173	510	3,326
67 Case Western Reserve U	3,858	3,858	4,179	2,397	793	0	544	2,521
68 U CA Santa Cruz	3,851	2,807	1,908	924	222	58	1,562	2,009
69 University of Colorado	3,833	3,791	4,948	4,050	951	173	1,838	871
70 New Sch for Socl Res	3,754	1,243	1,225	838	0	353	172	3,229
Total, 1st 70 insts.	738,469	691,987	635,646	581,283	188,850	133,576	146,594	269,449
71 Vanderbilt University	3,681	2,900	2,871	3,083	20	3,543	85	33
72 Wayne State University	3,661	2,660	2,603	2,042	277	26	333	3,025
73 US Naval Postgrad School	3,568	2,430	2,743	3,490	1,346	1,749	199	274
74 University of IL Chicago	3,565	2,727	3,879	3,496	49	41	1,026	2,449
75 Georgetown University	3,557	2,780	2,414	3,251	324	416	1,532	1,285
76 SUNY Stony Brook	3,481	2,257	2,130	2,308	542	1,070	251	1,618
77 University of Delaware	3,481	5,604	6,699	4,220	413	0	2,456	612
78 Mississippi State U	3,451	3,357	3,414	3,736	2,098	359	124	870
79 George Mason University	3,427	2,299	1,300	1,660	488	2,020	409	510
80 NC State U Raleigh	3,280	3,249	3,044	3,422	2,579	1	698	2
Total, 1st 80 insts.	773,621	722,250	666,743	611,991	196,986	142,801	153,707	280,127
81 University Hawaii Manoa	3,258	3,612	3,473	3,379	773	0	339	2,146
82 The University of Alabama	3,244	3,866	3,504	2,620	670	109	491	1,974
83 Syracuse University	3,213	2,254	3,800	3,634	206	622	436	1,949
84 Desert Research Institute	3,209	3,007	2,580	1,977	0	0	0	3,209
85 U of Alaska Fairbanks	3,163i	2,435i	3,077	2,397	199i	0i	1,782i	1,182i
86 Texas Tech University	3,141	2,674	2,780	3,299	817	38	1,961	325
87 U Arkansas Main	3,041	2,806	2,476	2,569	301	162	382	2,196
88 U CA Davis	2,963	2,512	2,353	2,143	46	1,019	238	1,660
89 Western Michigan U	2,854	1,831	1,071	1,886	119	800	364	1,571
90 U of Nebraska Lincoln	2,830	2,244	2,300	2,808	2,219	191	75	345
Total, 1st 90 insts.	804,537	749,491	694,157	638,703	202,336	145,742	159,775	296,684
91 U of Rhode Island	2,773i	2,733i	2,389i	2,269	2,356i	0i	9i	408i
92 Oregon State University	2,769	3,202	2,868	2,748	2,102	0	625	42
93 SUNY Binghamton	2,653	2,033	2,670	1,866	288	202	971	1,192
94 Yale University	2,623	4,436	3,570	2,903	893	140	23	1,567
95 University of Chicago	2,598	2,655	2,911	2,145	262	311	178	1,847
96 Portland State University	2,550	2,016	1,729	1,576	12	0	97	2,441
97 Tufts University	2,528	2,031e	1,629e	1,107	0	2,099	296	133
98 Georgia State University	2,406	1,872	1,390	1,597	1,278	172	891	65
99 Illinois State University	2,379	2,518	1,928	1,564	0	10	0	2,369
100 West Virginia University	2,324	2,414	2,202	1,586	1,625	59	202	438
Total, 1st 100 insts.	830,140	775,401	717,443	658,064	211,152	148,735	163,067	307,186
Total, all other sampled insts.	108,863	120,936	97,896	91,877	28,650	13,847	29,639	36,727
Estimated total non-sampled insts.	12,109	0	0	0	1,577	2,917	3,063	4,552

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-65. Federally financed R&D expenditures in the social sciences at universities and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

Page 1 of 2

Institution and ranking	1994	1993	1992	1991	1994, by subfield			
					Economics	Political science	Sociology	Other
Total, all institutions	359,318	338,359	281,298	252,717	75,774	51,811	96,676	135,057
1 University of Michigan	20,910	22,618	15,910	13,963	7,034	1,426	6,866	5,584
2 Harvard University	17,346	11,182	11,130	10,922	2,187	13,995	191	973
3 U WI Madison	16,504	15,393	12,410	10,684	5,314	274	5,670	5,246
4 U of NC Chapel Hill	12,906	9,928	8,274	6,406	27	0	6,385	6,494
5 Duke University	11,227	7,346	4,659	2,883	1,328	2,918	4,668	2,313
6 Ohio State University	11,201	12,721	9,075	11,382	3,268	795	408	6,730
7 U of Pennsylvania	9,585	8,557	7,221	4,324	987	158	1,556	6,884
8 U MD College Park	8,606	9,565	5,840	4,030	2,536	1,096	651	4,323
9 Rutgers the State U NJ	7,094	7,192	6,446	5,776	85	1,797	1,961	3,251
10 University of Washington	6,747	5,641	4,564	3,844	141	514	560	5,532
Total, 1st 10 insts.	122,126	110,143	85,529	74,214	22,907	22,973	28,916	47,330
11 University of Miami	6,434	9,597	7,146	2,047	0	0	533	5,901
12 Tulane University	5,581	3,734	3,653	3,004	0	43	79	5,459
13 Michigan State University	5,177	5,485	3,525	3,270	3,035	694	739	709
14 Brandeis University	4,995	4,991	5,639	5,128	153	159	4,518	165
15 Iowa State University	4,778	5,302	3,738	2,647	760	50	3,879	89
16 University of Pittsburgh	4,612	3,734	1,015	1,339	270	68	139	4,135
17 Johns Hopkins U	4,431	4,776	4,315	5,409	678	0	2,585	1,168
18 Columbia University	4,351	4,076	4,018	3,477	256	41	4,054	0
19 U CA Berkeley	4,218	5,798	5,385	6,485	3	1,602	1,229	1,384
20 Washington State U	4,211	3,427	2,361	2,075	3,021	0	747	443
Total, 1st 20 insts.	170,914	161,063	126,324	109,095	31,083	25,630	47,418	66,783
21 U TX Austin	4,195	3,501	2,479	3,691	1,865	339	1,350	641
22 University of Oklahoma	4,150	4,483	5,835	4,489	188	16	18	3,928
23 U CA Santa Barbara	4,117	4,145	4,411	3,177	0	1	9	4,107
24 U CA Los Angeles	3,939	3,433	2,394	2,434	191	24	218	3,506
25 Temple University	3,805	4,612	5,331	4,987	0	33	3,338	434
26 University of IL Urbana	3,743	3,938	3,024	2,967	1,189	515	35	2,004
27 Pennsylvania State U	3,653	3,982	3,380	4,194	897	146	2,339	271
28 MA Institute of Tech	3,639	3,435	1,691	1,285	1,089	1,026	0	1,524
29 U of South Carolina	3,575	2,762	1,850	1,735	835	246	967	1,527
30 US Naval Postgrad School	3,565	2,398	2,715	3,490	1,346	1,746	199	274
Total, 1st 30 insts.	209,295	197,752	159,434	141,544	38,683	29,722	55,891	84,999
31 Georgia Institute of Tech	3,539	4,270	4,347	4,876	3,257	89	95	98
32 Texas A&M University	3,397	2,160	2,142	1,531	1,096	448	1,497	356
33 Desert Research Institute	3,106	2,814	2,006	1,584	0	0	0	3,106
34 U of Southern California	2,938	3,145	2,389	2,158	42	0	2,555	341
35 U CA Irvine	2,798	2,767	2,305	1,737	0	1,456	86	1,256
36 University of Arizona	2,780	2,555	2,118	1,915	1,461	84	610	625
37 University of Minnesota	2,747	3,070	3,193	4,204	893	565	1,207	82
38 U of Missouri Columbia	2,650	2,176	1,798	1,445	2,193	0	345	112
39 George Washington U	2,623	3,021	2,268	134	27	2,471	12	113
40 U WI Milwaukee	2,332	2,133	2,032	1,532	21	299	13	1,999
Total, 1st 40 insts.	238,205	225,863	184,032	162,660	47,673	35,134	62,311	93,087
41 U CA Santa Cruz	2,308	1,622	1,336	353	89	43	1,483	693
42 University of Colorado	2,281	2,392	3,557	2,638	486	135	1,359	301
43 University of Delaware	2,264	2,573	2,717	1,672	22	0	2,028	214
44 Fort Valley State College	2,263e	2,289	2,384	2,047	1,493e	0	770e	0
45 Vanderbilt University	2,261	1,674	1,888	2,187	10	2,163	76	12
46 Carnegie Mellon U	2,246	3,325	2,678	2,121	996	690	0	560
47 SUNY Albany	2,225	2,623	2,346	2,665	107	288	927	903
48 Purdue University	2,224	2,120	1,613	1,419	1,263	0	925	36
49 Arizona State University	2,214	2,822	2,193	1,863	64	269	0	1,881
50 Northern Illinois U	2,210	1,485	1,216	1,323	109	1,667	293	141
Total, 1st 50 insts.	260,701	248,788	205,960	180,948	52,312	40,389	70,172	97,828

See explanatory information and SOURCE at end of table.

Table B-65. Federally financed R&D expenditures in the social sciences at universities and colleges: fiscal years 1991-94 and by subfield for 1994

[Dollars in thousands]

Page 2 of 2

Institution and ranking	1994	1993	1992	1991	1994, by subfield			
					Economics	Political science	Sociology	Other
51 U of Tennessee System	2,093	2,062	1,560	1,258	1,264	353	414	62
52 U of Rhode Island	2,077 i	2,051 i	1,603 i	1,508	2,077 i	0 i	0 i	0 i
53 Cornell University	2,025	2,496	2,377	1,902	883	19	465	658
54 Princeton University	1,966	1,948	1,564	1,063	416	1,282	172	96
55 Georgetown University	1,934	1,444	1,394	2,188	268	75	978	613
56 Clemson University	1,847	1,968	1,481	1,400	941	389	55	462
57 Portland State University	1,601	1,272	1,200	875	0	0	71	1,530
58 George Mason University	1,593	1,242	331	602	0	1,240	49	304
59 University of Florida	1,516	769	925	1,303	82	283	507	644
60 U CA Davis	1,510	1,029	583	528	7	126	130	1,247
Total, 1st 60 insts	278,863	265,069	218,978	193,575	58,250	44,156	73,013	103,444
61 Syracuse University	1,454	671	702	739	0	25	410	1,019
62 University of Connecticut	1,412	951	549	216	671	131	607	3
63 Northeast Louisiana U	1,354	1,371	1,800	569	1,028	0	326	0
64 U of Iowa	1,354	1,130	1,101	1,230	377	515	217	245
65 Emory University	1,348	1,225	459	449	0	1,345	3	0
66 University of Georgia	1,348	1,296	1,368	1,564	543	29	40	736
67 Colorado State University	1,301	448	437	3,598	366	0	18	917
68 VA Polytech Inst & St U	1,257	1,801	1,316	1,436	227	50	30	950
69 U of New Hampshire	1,253	1,944	1,269	1,205	0	0	405	848
70 University of New Mexico	1,244	1,075	1,281	961	13	171	335	725
Total, 1st 70 insts	292,188	276,981	229,260	205,542	61,475	46,422	75,404	108,887
71 University of Kentucky	1,238	1,465	1,239	785	92	9	1,048	89
72 SUNY Stony Brook	1,236	998	865	926	138	384	195	519
73 Indiana University	1,191	1,274	840	823	252	40	389	510
74 Texas Tech University	1,187	1,107	1,370	1,272	83	26	1,062	16
75 SUNY Buffalo	1,163	374	822	521	0	70	63	1,030
76 U TX El Paso	1,159	646	384	271	0	84	1,070	5
77 New York University	1,144	845	999	577	305	252	165	422
78 South Carolina State Col	1,139 i	1,022 i	862 i	544 i	960 i	0 i	179 i	0 i
79 University North Dakota	1,133	843	383	537	0	0	0	1,133
80 Howard University	1,068	634	514	406	0	0	1,068	0
Total, 1st 80 insts	303,846	286,189	237,538	212,204	63,305	47,287	80,643	112,611
81 NC State U Raleigh	1,041	1,169	1,131	876	818	0	223	0
82 University of IL Chicago	1,030	423	666	555	0	0	797	233
83 Mississippi State U	1,020	1,026	1,228	1,077	588	22	55	355
84 Case Western Reserve U	1,010	872	828	649	110	0	468	432
85 Oregon State University	957	1,215	1,058	855	702	0	236	19
86 Stanford University	943	820	1,464	1,394	113	0	469	361
87 U CA San Diego	927	935	537	389	400	358	134	35
88 Florida Atlantic U	908	114	8	0	644	0	0	264
89 University of Oregon	892	853	545	546	122	182	104	484
90 U TX Hlth Sci Ctr Houston	859	527	538	477	0	0	859	0
Total, 1st 90 insts	313,433	294,143	245,541	219,022	66,802	47,849	83,988	114,794
91 American University	857	963	1,138	1,390	0	177	342	338
92 CUNY Hunter College	857	943	131	199	67	0	144	646
93 Washington University	856	504	791	856	44	6	777	29
94 North Dakota State U	850	502	604	565	850	0	0	0
95 The University of Alabama	845	394	63	64	117	98	46	584
96 Yale University	834	957	670	770	396	23	15	400
97 Brown University	790	1,049	917	425	49	19	32	690
98 Louisiana St U, All Camp	789	1,146	624	464	129	15	76	569
99 Utah State University	771	410	325	248	41	2	175	553
100 U of Maine	769	480	437	370	698	0	17	54
Total, 1st 100 insts	321,651	301,491	251,241	224,373	69,193	48,189	85,612	118,657
Total, all other sampled insts	32,659	36,868	30,057	28,344	6,274	3,023	9,137	14,225
Estimated total non-sampled insts	5,008	0	0	0	307	599	1,927	2,175

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
... = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-66. Current fund expenditures for research equipment at universities and colleges, by science and engineering field and source of funds: fiscal years 1987, 1993, and 1994

[Dollars in thousands]

Page 1 of 1

Field	Total			Federal			Non-Federal		
	1994	1993	1987	1994	1993	1987	1994	1993	1987
Total	1,105,514	1,038,477	837,000	662,767	635,903	526,384	442,747	402,574	310,616
Engineering, total	250,056	217,532	178,326	147,842	127,944	105,319	102,214	89,588	73,007
Aeronautical and astronautical	18,433	13,272	8,564	14,058	10,794	6,398	4,376	2,478	2,166
Chemical	18,281	21,127	14,657	10,696	9,941	7,856	7,585	11,186	6,801
Civil	18,303	18,239	11,559	7,717	8,082	6,659	10,587	10,157	4,900
Electrical	63,852	55,808	43,666	42,299	36,620	30,148	21,553	19,188	13,518
Mechanical	35,580	34,328	25,181	23,463	22,187	16,087	12,117	12,141	9,094
Metallurgical and materials[1]	25,567	23,534	--	12,077	11,984	--	13,490	11,550	--
Other, n.e.c.	70,040	51,224	74,699	37,533	28,336	38,171	32,507	22,888	36,528
All sciences, total	855,457	820,945	658,674	514,925	507,959	421,065	340,533	312,986	237,609
Physical sciences	206,769	206,999	166,190	151,183	153,553	130,530	55,586	53,446	35,660
Astronomy	19,602	16,746	6,546	12,010	10,942	4,919	7,592	5,804	1,627
Chemistry	79,648	74,708	65,886	55,266	52,756	48,814	24,382	21,952	17,072
Physics	87,639	86,576	81,594	69,612	64,993	67,054	18,027	21,583	14,540
Other, n.e.c.	19,880	28,969	12,164	14,295	24,862	9,743	5,585	4,107	2,421
Environmental sciences	83,718	76,380	55,355	59,874	53,910	35,914	23,844	22,470	19,441
Atmospheric	12,192	14,490	11,220	9,329	11,301	8,946	2,863	3,189	2,274
Earth sciences	30,607	26,717	20,371	20,538	16,367	10,549	10,069	10,350	9,822
Oceanography	26,103	23,761	16,727	20,365	18,909	12,536	5,738	4,852	4,191
Other, n.e.c.	14,816	11,412	7,037	9,642	7,333	3,883	5,174	4,079	3,154
Mathematical sciences	14,753	15,108	9,789	10,676	11,349	7,596	4,077	3,759	2,193
Computer sciences	58,557	53,330	42,792	40,269	37,266	33,932	18,288	16,064	8,860
Life sciences	435,334	416,688	335,347	226,405	226,209	187,842	208,929	190,479	147,505
Agricultural sciences	68,962	53,315	49,113	24,212	19,544	15,626	44,750	33,771	33,487
Biological sciences	175,786	170,447	129,705	105,323	103,652	83,689	70,463	66,795	46,016
Medical sciences	170,949	177,124	142,047	88,301	95,777	81,634	82,648	81,347	60,413
Other, n.e.c.	19,637	15,802	14,482	8,569	7,236	6,893	11,068	8,566	7,589
Psychology	12,628	15,401	10,567	7,711	10,552	8,089	4,917	4,849	2,478
Social sciences	20,693	18,908	11,803	8,318	7,629	3,456	12,376	11,279	8,347
Economics	5,392	4,614	2,884	2,343	1,854	834	3,049	2,760	2,050
Political science	2,544	2,852	1,292	1,042	871	346	1,502	1,981	946
Sociology	3,784	3,668	2,132	1,710	1,929	800	2,075	1,739	1,332
Other, n.e.c.	8,973	7,774	5,495	3,223	2,975	1,476	5,750	4,799	4,019
Other sciences, n.e.c.	23,006	18,131	26,831	10,490	7,491	13,706	12,516	10,640	13,125

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-67. Current fund expenditures for research equipment at doctorate-granting institutions, by science and engineering field and source of funds: fiscal years 1987, 1993, and 1994

[Dollars in thousands]

Page 1 of 1

Field	Total			Federal			Non-Federal		
	1994	1993	1987	1994	1993	1987	1994	1993	1987
Total	1,066,745	1,003,577	819,268	639,148	615,261	516,566	427,597	388,316	302,702
Engineering, total	245,503	211,612	175,551	144,857	125,164	104,110	100,646	86,448	71,441
Aeronautical and astronautical	18,255	13,001	8,462	13,935	10,546	6,311	4,320	2,455	2,151
Chemical	18,162	21,010	14,411	10,581	9,871	7,764	7,581	11,139	6,647
Civil	17,981	17,273	11,302	7,523	7,505	6,609	10,458	9,768	4,693
Electrical	62,383	54,752	42,973	41,541	35,989	29,854	20,842	18,763	13,119
Mechanical	34,917	32,912	24,625	23,056	21,430	15,730	11,861	11,482	8,895
Metallurgical and materials[1]	25,543	23,430	—	12,053	11,936	—	13,490	11,494	—
Other, n.e.c.	68,262	49,234	73,778	36,168	27,887	37,842	32,094	21,347	35,936
All sciences, total	821,242	791,965	643,717	494,291	490,097	412,456	326,951	301,868	231,261
Physical sciences	195,491	197,021	161,992	142,903	147,457	127,816	52,588	49,564	34,176
Astronomy	19,524	16,528	6,443	11,983	10,828	4,854	7,541	5,700	1,589
Chemistry	71,562	69,164	63,274	49,229	49,509	47,174	22,333	19,655	16,100
Physics	84,595	82,582	80,186	67,422	62,368	66,078	17,173	20,214	14,108
Other, n.e.c.	19,810	28,747	12,089	14,269	24,752	9,710	5,541	3,995	2,379
Environmental sciences	78,515	72,205	52,999	57,078	51,793	34,947	21,437	20,412	18,052
Atmospheric	12,120	14,268	11,111	9,321	11,209	8,850	2,799	3,059	2,261
Earth sciences	27,274	25,181	19,698	18,455	15,917	10,287	8,819	9,264	9,411
Oceanography	24,551	21,992	15,506	19,802	17,734	12,095	4,749	4,258	3,411
Other, n.e.c.	14,570	10,764	6,684	9,500	6,933	3,715	5,070	3,831	2,969
Mathematical sciences	13,222	13,676	9,358	9,784	10,488	7,319	3,438	3,188	2,039
Computer sciences	56,611	51,930	41,831	38,833	36,509	33,534	17,778	15,421	8,297
Life sciences	423,544	408,461	330,549	220,541	220,961	184,663	203,003	187,500	145,886
Agricultural sciences	65,613	50,803	47,611	21,691	17,485	14,400	43,922	33,318	33,211
Biological sciences	167,752	165,260	126,816	102,139	100,727	82,029	65,613	64,533	44,787
Medical sciences	170,733	176,718	141,739	88,153	95,572	81,404	82,580	81,146	60,335
Other, n.e.c.	19,446	15,680	14,383	8,558	7,177	6,830	10,888	8,503	7,553
Psychology	11,969	13,991	9,921	7,159	9,441	7,662	4,810	4,550	2,259
Social sciences	19,691	18,128	10,599	7,553	7,129	3,033	12,138	10,999	7,566
Economics	5,002	4,250	2,582	2,004	1,564	741	2,998	2,686	1,841
Political science	2,430	2,780	1,124	979	829	256	1,451	1,951	868
Sociology	3,548	3,500	1,897	1,565	1,860	715	1,983	1,640	1,182
Other, n.e.c.	8,711	7,598	4,996	3,005	2,876	1,321	5,706	4,722	3,675
Other sciences, n.e.c.	22,199	16,553	26,468	10,440	6,319	13,482	11,759	10,234	12,986

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY: n.e.c. = not elsewhere classified
— = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-68. Current fund expenditures for research equipment at universities and colleges, by science and engineering field, source of funds, and type of control: fiscal year 1994

[Dollars in thousands]

Page 1 of 1

Field	Total			Federal			Non-Federal		
	Total	Public	Private	Total	Public	Private	Total	Public	Private
Total	1,105,514	745,529	359,984	662,767	402,922	259,844	442,747	342,607	100,140
Engineering, total	250,056	174,432	75,625	147,842	90,476	57,366	102,214	83,956	18,259
Aeronautical and astronautical	18,433	10,537	7,897	14,058	7,358	6,700	4,376	3,179	1,197
Chemical	18,281	12,373	5,908	10,696	6,914	3,782	7,585	5,459	2,126
Civil	18,303	14,943	3,360	7,717	5,112	2,605	10,587	9,832	755
Electrical	63,852	43,563	20,289	42,299	25,245	17,053	21,553	18,317	3,236
Mechanical	35,580	21,109	14,471	23,463	11,737	11,726	12,117	9,372	2,745
Metallurgical and materials	25,567	21,346	4,221	12,077	10,003	2,074	13,490	11,343	2,147
Other, n.e.c.	70,040	50,561	19,479	37,533	24,108	13,426	32,507	26,454	6,053
All sciences, total	855,457	571,098	284,360	514,925	312,446	202,479	340,533	258,652	81,881
Physical sciences	206,769	124,985	81,784	151,183	83,745	67,438	55,586	41,240	14,346
Astronomy	19,602	10,221	9,381	12,010	5,260	6,750	7,592	4,961	2,631
Chemistry	79,648	52,502	27,146	55,266	34,797	20,468	24,382	17,704	6,678
Physics	87,639	47,255	40,384	69,612	33,603	36,009	18,027	13,652	4,375
Other, n.e.c.	19,880	15,008	4,872	14,295	10,085	4,210	5,585	4,923	662
Environmental sciences	83,718	63,779	19,939	59,874	42,398	17,475	23,844	21,380	2,464
Atmospheric	12,192	9,550	2,642	9,329	6,754	2,575	2,863	2,796	67
Earth sciences	30,607	22,402	8,205	20,538	13,616	6,921	10,069	8,785	1,284
Oceanography	26,103	22,633	3,470	20,365	17,276	3,089	5,738	5,357	381
Other, n.e.c.	14,816	9,194	5,622	9,642	4,752	4,890	5,174	4,442	732
Mathematical sciences	14,753	9,304	5,449	10,676	6,326	4,349	4,077	2,977	1,100
Computer sciences	58,557	31,232	27,325	40,269	18,554	21,715	18,288	12,678	5,610
Life sciences	435,334	300,604	134,730	226,405	142,393	84,012	208,929	158,211	50,718
Agricultural sciences	68,962	66,714	2,248	24,212	23,371	841	44,750	43,342	1,408
Biological sciences	175,786	115,064	60,722	105,323	62,751	42,572	70,463	52,313	18,150
Medical sciences	170,949	106,655	64,294	88,301	51,621	36,680	82,648	55,034	27,614
Other, n.e.c.	19,637	12,172	7,465	8,569	4,650	3,919	11,068	7,522	3,546
Psychology	12,628	7,830	4,798	7,711	4,495	3,216	4,917	3,335	1,582
Social sciences	20,693	15,807	4,886	8,318	5,891	2,426	12,376	9,916	2,460
Economics	5,392	4,568	824	2,343	1,975	368	3,049	2,593	456
Political science	2,544	1,675	869	1,042	703	339	1,502	972	530
Sociology	3,784	3,114	671	1,710	1,405	305	2,075	1,709	366
Other, n.e.c.	8,973	6,451	2,522	3,223	1,809	1,415	5,750	4,643	1,107
Other sciences, n.e.c.	23,006	17,557	5,449	10,490	8,643	1,848	12,516	8,914	3,601

NOTE: Because of rounding, figures may not add to the totals shown.

KEY: n.e.c. = not elsewhere classified
— = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-69. Total and federally financed current fund expenditures for research equipment at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

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Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
Total, all institutions	1,105,514	1,038,477	1,032,150	1,023,901	662,767	635,903	617,188	610,319
1 U WI Madison	33,093	26,887	28,145	25,841	18,073	13,884	15,137	13,753
2 MA Institute of Tech	25,605	26,629	27,186	23,820	19,705	20,795	20,995	18,079
3 Johns Hopkins U	24,136 i	23,480	19,298	25,567	21,886 i	21,552	17,488	23,489
4 University of Washington	22,995	24,144	18,834	22,317	19,419	17,247	14,737	16,540
5 Georgia Institute of Tech	19,919	10,768	10,985	11,137	9,986	6,025	6,173	6,397
6 Pennsylvania State U	19,121	17,008	14,742	15,118	9,777	10,595	9,201	11,245
7 University of Michigan	18,831	16,602	15,870	16,118	11,504	10,370	9,888	9,446
8 Cornell University	17,954	22,165	20,875	21,912	11,738	14,387	14,276	12,504
9 University of IL Urbana	17,743	17,911	21,951	21,437	10,226	10,513	11,207	9,957
10 Louisiana St U, All Camp	15,759	16,891	16,678	23,377	3,245	5,691	5,168	13,347
Total, 1st 10 insts	215,156	202,485	194,564	206,644	135,559	131,059	124,270	134,757
11 Texas A&M University	15,311	14,979	25,821	14,046	7,465	6,223	16,279	4,818
12 Stanford University	15,039	16,317	26,230	21,200	12,761	15,204	24,361	18,764
13 University of Minnesota	13,526	12,721	12,877	13,470	8,362	7,232	7,825	7,203
14 University of Georgia	13,371	11,373	9,637	9,480	2,461	4,238	3,168	3,205
15 California Inst of Tech	13,266	13,726	12,276	16,242	12,077	12,564	10,939	14,497
16 University of Colorado	13,219	9,599	8,487	8,311	9,046	6,609	6,715	6,494
17 University of Arizona	12,990	12,815	12,841	13,882	7,409	7,495	8,349	7,710
18 U TX Austin	11,951	10,087	12,747	11,542	8,270	6,796	7,751	7,248
19 University of Rochester	11,709	11,190	9,899	7,788	9,735	9,256	7,901	5,899
20 Columbia University	11,500	10,942	10,788	11,552	9,629	9,322	9,492	9,526
Total, 1st 20 insts	347,038	326,234	336,167	334,157	222,774	215,998	227,050	220,121
21 University of Florida	11,146	7,605	6,202	6,996	2,994	2,609	1,975	2,795
22 Purdue University	10,980	8,051	8,272	7,899	6,118	5,530	5,565	4,516
23 Florida State University	10,828	15,002	3,097	3,622	6,776	14,139	2,378	1,858
24 NC State U Raleigh	10,793	10,827	10,396	12,736	4,870	5,737	5,052	5,516
25 Northwestern University	10,664	10,200	10,904	10,025	5,633	4,798	4,615	3,477
26 U of Southern California	10,660	12,137	9,878	10,530	8,969	10,633	8,094	9,103
27 Yale University	10,621	11,340	13,431	11,063	7,242	7,697	8,033	7,706
28 University of Chicago	10,569	8,397	9,657	7,485	8,075	7,023	7,372	6,251
29 U MD College Park	10,358	8,325	8,175	5,638	4,624	3,870	4,584	4,803
30 Washington University	10,145	8,247	9,219	8,262	7,615	5,752	6,552	5,952
Total, 1st 30 insts	453,802	426,365	425,398	418,413	285,690	283,786	281,270	272,098
31 Carnegie Mellon U	9,812	8,167	8,296	7,618	8,626	6,556	5,962	5,006
32 Ohio State University	9,805	7,027	7,339	8,702	5,137	3,520	4,204	3,894
33 Harvard University	9,792	10,241	11,733	8,834	7,101	7,210	8,203	6,839
34 U of Pennsylvania	9,727	10,494	10,277	9,289	6,987	7,708	7,447	6,650
35 Rutgers the State U NJ	9,336	5,946	5,967	6,337	6,614	2,588	1,840	2,138
36 U of NC Chapel Hill	9,314	9,944	7,536	8,212	5,094	5,936	4,399	4,227
37 University of Virginia	9,174	7,120	6,768	5,093	7,408	5,188	4,681	3,488
38 Duke University	9,127	11,424	9,941	11,203	5,585	7,394	6,295	8,045
39 University of Miami	8,763	8,986	8,277	9,024	6,806	6,775	6,413	6,720
40 Michigan State University	8,331	5,254	5,763	5,653 i	5,771	3,711	3,787	2,615 i
Total, 1st 40 insts	546,983	510,968	507,295	498,376	350,819	340,372	334,501	321,720
41 U of Central Florida	8,286	2,493	1,546	3,559	1,305	1,399	768	1,123
42 U CA Davis	7,959	5,199	5,681	4,936	4,716	2,585	2,665	2,440
43 US Naval Postgrad School	7,543	6,025	4,081	4,614	7,482	6,008	4,026	4,614
44 Case Western Reserve U	7,526	6,783	6,571	5,441	5,495 i	4,997 i	4,463	3,989 i
45 Iowa State University	7,385	6,175	5,971	11,477	1,879	1,870	3,477	7,400
46 Indiana University	7,366	8,658	9,589	5,890	4,417	4,568	5,148	3,572
47 U CA Los Angeles	7,327	7,961	6,697	7,433	5,141	4,248	3,489	4,810
48 U CA San Diego	7,104	7,166	8,983	12,227	4,848	5,192	6,360	7,864
49 Arizona State University	7,068	5,669	6,365	6,488	2,396	2,179	2,373	1,698
50 SUNY Stony Brook	7,026	6,709	6,495	5,912	4,449	4,227	4,101	4,722
Total, 1st 50 insts	621,573	573,806	569,274	566,355	392,947	377,645	371,371	363,952

See explanatory information and SOURCE at end of table.

Table B-69. Total and federally financed current fund expenditures for research equipment at universities and colleges: fiscal years 1991-94

[Dollars in thousands]

Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
51 U of Nebraska Lincoln	6,993	6,965	5,528	7,017	1,759	1,395	1,326	1,692
52 U of Iowa	6,930	7,416	7,352	7,840	3,038	3,903	3,877	3,278
53 U CA San Francisco	6,918	9,301	8,779	7,661	4,134	5,803	5,145	4,889
54 U of Tennessee System	6,795	7,824	5,755	6,638	2,952	2,998	3,026	2,377
55 University of New Mexico	6,608	4,897	5,254	3,998	4,651	3,014	2,825	1,728
56 University of Utah	6,548	7,316	10,462	8,044	5,338	5,934	5,632	4,283
57 Colorado State University	6,527	4,375	4,182	5,376	3,717	3,399	2,906	4,466
58 U CA Berkeley	6,348	6,718	6,771	5,737	4,256	4,662	4,522	4,285
59 Baylor Col of Medicine	6,126	7,909	8,565	8,765	2,413	3,314	3,822	4,209
60 Princeton University	6,085	5,732	6,279	4,792	4,516	3,808	3,869	4,034
Total, 1st 60 insts	687,451	642,259	638,201	632,223	429,721	415,875	408,323	399,193
61 Mississippi State U	5,944	3,899	4,268	2,358	3,995	2,469	2,826	1,435
62 Rockefeller University	5,901	4,435	4,401	4,095	2,714	2,040	2,026	1,884
63 New York University	5,855	5,254	4,071	3,349	2,248	4,704	3,075	2,533
64 University of Idaho	5,830	2,261	2,655	2,525	3,525	1,174	1,304	1,254
65 Florida International U	5,828	4,868	—	—	4,140	3,724		
66 Auburn University	5,735	3,591	2,945	4,718	1,694	540	519	1,467
67 New Mexico State U	5,728	6,192	6,700	14,508	5,115	5,714	6,044	13,768
68 University of Pittsburgh	5,654	4,869	6,308	5,798	4,068	3,316	4,893	3,964
69 U of Missouri Columbia	5,480	4,951	5,350	5,870	1,047	1,246	1,420	1,562
70 SUNY Buffalo	5,425	4,530	5,044	4,915	3,710	3,514	3,157	3,078
Total, 1st 70 insts	744,831	687,109	679,943	680,359	461,977	444,316	433,587	430,128
71 Woods Hole Oceanograph	5,415	3,375	3,586	4,160 i	4,884	3,062	2,886	3,629 i
72 U of Alabama Birmingham	5,399	5,948	4,759	4,322	3,540	4,058	3,049	2,572
73 U TX SW Med Ctr Dallas	5,284	6,431	4,203	6,364	1,677	1,383	1,451	2,335
74 Kansas State University	5,197	4,250	4,694	3,722	2,089	2,087	2,421	1,542
75 University of IL Chicago	5,171	5,325	5,094	4,851	2,155	2,091	2,449	1,611
76 Syracuse University	5,085	2,531	4,874	4,052	669	681	870	758
77 University of Oklahoma	4,846	5,077	6,021	4,434	2,416	1,310	1,182	723
78 Oregon State University	4,565	4,253	6,242	3,769	3,647	2,975	5,515	3,027
79 Vanderbilt University	4,549	4,209	4,608	4,904	3,483	3,213	3,575	4,229
80 U of South Carolina	4,486	4,011	3,983	6,543	3,551	1,990	1,151	1,236
Total, 1st 80 insts	794,828	732,519	728,007	727,480	490,086	467,166	458,139	451,820
81 U of South Florida	4,446	3,465	4,959	4,239	1,438	886	1,352	1,757
82 Emory University	4,392	4,188	5,024	4,896	2,731	2,359	3,909	3,112
83 University of Dayton	4,392	1,857	1,713	1,015	3,763	1,349	1,118	482
84 U TX Med Br Galveston	4,372	2,657	5,133	2,229	1,751	1,351	1,401	1,211
85 University of Kentucky	4,338	3,713	6,494	3,258	1,696	1,818	1,230	1,046
86 U CA Irvine	4,283	5,099	3,772	4,137	2,567	3,420	2,443	3,151
87 Wayne State University	4,254	4,694	7,086	4,859	1,042	1,190	1,201	1,102
88 West Virginia University	4,229	4,546	2,866	4,150	3,614	3,995	2,303	2,038
89 Oklahoma State University	4,041	3,766	3,102	3,897	976	1,186	746	1,564
90 University of Notre Dame	4,039	5,346	3,462	2,928	2,694	3,749	1,988	1,282
Total, 1st 90 insts	837,614	771,850	771,618	763,088	512,360	488,469	475,859	468,565
91 Tulane University	3,902	2,303	3,409	3,170	2,212	1,283	1,593	2,058
92 U MA Amherst	3,901	4,333	3,582	—	2,252	2,254	2,298	—
93 U Arkansas Main	3,816	2,984	1,886	2,116	1,769	1,351	1,042	799
94 University of Cincinnati	3,751	4,119	4,305	3,642	2,178	2,200	2,983	1,559
95 Clemson University	3,681	4,114	6,396	3,162	1,262	1,657	1,210	751
96 U MD Baltimore Prof Sch	3,653	3,847	4,209	3,956	1,393	1,527	1,331	1,093
97 U CA Santa Barbara	3,586	3,371	2,874	3,112	3,298	2,541	2,260	2,039
98 U of New Hampshire	3,525	3,058 i	2,594 i	2,130 i	2,345	1,627 i	1,660 i	1,333 i
99 VA Polytech Inst & St U	3,507	3,534	3,157	4,369	1,681	1,741	1,202	1,888
100 University of Kansas	3,456	3,281	3,481	2,916	1,714	1,759	1,763	1,279
Total, 1st 100 insts	874,392	806,794	807,511	791,661	532,464	506,809	493,221	481,364
Total, all other sampled insts	211,765	231,683	224,639	232,240	120,074	129,094	123,967	128,955
Estimated total non-sampled insts	19,357	0	0	0	10,229	0	0	0

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
— = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-70. R&D expenditures at university-administered federally funded research and development centers, by character of work: fiscal years 1953-94

[Dollars in millions]

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Fiscal year	Total	Character of work			
		Basic research		Applied research and development	
		Amount	Percent of total	Amount	Percent of total
1953	121	33	27.3	88	72.7
1954	141	39	27.7	102	72.3
1955	180	49	27.2	131	72.8
1956	194	51	26.3	143	73.7
1957	240	65	27.1	175	72.9
1958	293	78	26.6	215	73.4
1959	338	92	27.2	246	72.8
1960	360	97	26.9	263	73.1
1961	410	115	28.0	295	72.0
1962	470	136	28.9	334	71.1
1963	530	159	30.0	371	70.0
1964	629	191	30.4	438	69.6
1965	629	208	33.1	421	66.9
1966	630	227	36.0	403	64.0
1967	673	250	37.1	423	62.9
1968	719	276	38.4	443	61.6
1969	725	275	37.9	450	62.1
1970	737	269	36.5	468	63.5
1971	716	260	36.3	456	63.7
1972	753	244	32.4	509	67.6
1973	817	296	36.2	521	63.8
1974	865	390	45.1	475	54.9
1975	987	439	44.5	548	55.5
1976	1,147	512	44.6	635	55.4
1977	1,384	600	43.4	784	56.6
1978[1]	1,717	--	--	--	--
1979	1,935	1,022	52.8	913	47.2
1980	2,246	1,132	50.4	1,114	49.6
1981	2,486	1,270	51.1	1,216	48.9
1982	2,479	1,327	53.5	1,152	46.5
1983	2,737	1,484	54.2	1,253	45.8
1984	3,150	1,690	53.7	1,461	46.4
1985	3,523	1,765	50.1	1,758	49.9
1986	3,895	1,876	48.2	2,018	51.8
1987	4,206	2,033	48.3	2,173	51.7
1988	4,531	2,245	49.5	2,285	50.4
1989	4,730	2,352	49.7	2,377	50.3
1990	4,832	2,428	50.2	2,404	49.8
1991	5,078	2,595	51.1	2,484	48.9
1992	5,247	2,843	54.2	2,404	45.8
1993	5,295	2,938	55.5	2,357	44.5
1994	5,271	3,008	57.1	2,263	42.9

[1] Separate data for basic research and applied research and development were not collected for fiscal year 1978.

NOTE: Because of rounding, figures may not add to the totals shown.

KEY: -- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-71. R&D expenditures at university-administered federally funded research and development centers, by science and engineering field: fiscal years 1987-94

[Dollars in thousands]

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Field	1994	1993	1992	1991	1990	1989	1988	1987
Total	5,270,883	5,295,403	5,247,271	5,078,386	4,831,895	4,729,612	4,530,562	4,206,084
Engineering, total	1,691,089	1,713,257	1,804,266	1,788,516	1,708,098	1,642,799	1,614,250	1,547,061
Aeronautical and astronautical	128,436	158,952	162,722	156,265	143,643	145,035	146,894	132,238
Chemical	78,613	76,470	78,425	70,277	40,754	40,162	43,964	41,884
Civil	30,703	32,575	33,583	16,109	15,083	16,439	17,500	17,568
Electrical	508,204	534,275	597,540	638,886	604,894	568,626	555,635	550,430
Mechanical	502,033	417,492	468,827	487,644	545,093	628,057	602,857	570,698
Metallurgical and materials[1]	64,274	131,835	147,082	137,517	85,650	--	--	--
Other, n.e.c.	378,826	361,658	316,087	281,818	272,981	244,480	247,400	234,243
All sciences, total	3,579,794	3,582,146	3,443,005	3,289,870	3,123,797	3,086,813	2,916,312	2,659,023
Physical sciences	2,188,768	2,209,274	2,010,283	1,917,163	1,824,608	1,828,314	1,717,181	1,660,404
Astronomy	173,464	145,361	138,273	121,353	112,239	112,493	117,658	82,360
Chemistry	273,236	281,492	267,909	251,727	261,008	274,359	274,647	261,267
Physics	1,630,359	1,674,567	1,498,258	1,460,765	1,382,608	1,378,015	1,263,616	1,257,808
Other, n.e.c.	111,709	107,854	105,843	83,318	68,753	63,447	61,260	58,969
Environmental sciences	396,919	344,502	352,893	318,874	292,045	298,529	289,352	257,800
Atmospheric	183,995	156,327	149,233	125,612	103,239	98,594	91,069	103,504
Earth sciences	59,455	62,907	77,051	72,271	64,894	65,212	80,190	76,276
Oceanography	13,406	17,185	15,811	14,859	1,664	1,916	1,764	2,032
Other, n.e.c.	140,063	108,083	110,798	106,132	122,248	132,807	116,329	75,988
Mathematical sciences	113,971	119,938	124,313	132,222	135,374	128,664	126,084	121,793
Computer sciences	618,965	649,363	699,551	715,744	685,954	668,092	621,744	472,766
Life sciences	189,881	191,261	191,166	145,531	142,394	130,556	123,508	115,416
Agricultural sciences	1,216	1,077	1,153	1,041	1,017	1,175	1,397	684
Biological sciences	114,201	136,797	139,047	115,145	112,559	101,287	91,712	87,202
Medical sciences	15,324	14,897	16,250	11,355	10,345	10,114	12,996	10,570
Other, n.e.c.	59,140	38,490	34,716	17,990	18,473	17,980	17,403	16,960
Psychology	807	887	945	1,075	1,010	947	973	899
Social sciences	22,672	21,729	21,417	33,935	29,744	23,291	27,868	21,421
Economics	540	578	613	741	632	491	1,477	2,554
Political science	5,662	5,350	5,055	7,610	6,459	3,858	5,843	4,563
Sociology	0	0	0	0	0	0	0	0
Other, n.e.c.	16,470	15,801	15,749	25,584	22,653	18,942	20,548	14,304
Other sciences, n.e.c.	47,811	45,192	42,437	25,326	12,668	8,420	9,602	8,524

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990

NOTE: Because of rounding, figures may not add to the totals shown

KEY:
n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-72. Federally financed R&D expenditures at university-administered federally funded research and development centers, by science and engineering field: fiscal years 1987-94

[Dollars in thousands]

Page 1 of 1

Field	1994	1993	1992	1991	1990	1989	1988	1987
Total	5,202,525	5,241,537	5,197,986	5,033,968	4,791,441	4,692,202	4,498,909	4,174,718
Engineering, total	1,675,633	1,700,839	1,794,182	1,778,686	1,699,463	1,633,585	1,607,422	1,539,481
Aeronautical and astronautical	128,343	158,832	162,602	156,108	143,495	144,910	146,813	132,169
Chemical	77,714	75,541	77,551	69,592	40,218	39,534	43,427	41,378
Civil	30,275	32,050	33,068	15,871	14,892	16,238	17,335	17,415
Electrical	503,721	531,629	595,600	636,548	602,489	566,345	554,139	548,560
Mechanical	497,730	415,151	467,487	486,112	543,687	624,909	600,584	567,922
Metallurgical and materials[1]	63,828	130,109	145,561	135,947	84,196	--	--	--
Other, n.e.c.	374,022	357,527	312,313	278,508	270,486	241,649	245,124	232,037
All sciences, total	3,526,892	3,540,698	3,403,804	3,255,282	3,091,978	3,058,617	2,891,487	2,635,237
Physical sciences	2,165,245	2,187,407	1,992,759	1,898,501	1,805,674	1,813,116	1,707,217	1,649,404
Astronomy	172,847	144,302	137,832	120,725	110,708	110,724	115,601	80,418
Chemistry	270,088	277,458	265,103	248,837	258,698	271,891	272,970	259,457
Physics	1,617,090	1,663,784	1,489,596	1,449,997	1,370,313	1,368,531	1,258,268	1,251,388
Other, n.e.c.	105,220	101,863	100,228	78,942	65,955	61,970	60,378	58,141
Environmental sciences	378,043	335,223	339,449	314,269	288,489	294,192	286,106	254,889
Atmospheric	169,125	149,637	138,362	123,624	101,226	96,625	89,620	102,269
Earth sciences	58,355	61,990	76,103	71,294	64,418	64,938	79,720	75,782
Oceanography	13,406	17,185	15,811	14,859	1,664	1,916	1,764	2,032
Other, n.e.c.	137,157	106,411	109,173	104,492	121,181	130,713	115,002	74,806
Mathematical sciences	112,468	118,872	123,471	131,130	134,246	127,724	125,434	121,075
Computer sciences	616,498	647,575	698,151	713,894	684,876	667,127	621,172	472,142
Life sciences	184,834	185,328	186,711	138,335	136,719	126,607	117,451	111,233
Agricultural sciences	1,216	1,077	1,153	1,041	1,017	1,175	1,397	684
Biological sciences	110224	131,711	135,405	108,423	107,206	97,639	90,372	85,767
Medical sciences	15018	14,619	15,987	11,161	10,304	10,061	8,451	7,973
Other, n.e.c.	58376	37,921	34,166	17,710	18,192	17,732	17,231	16,809
Psychology	806	887	945	1,075	1,010	947	973	899
Social sciences	22380	21,404	21,074	33,325	29,231	22,942	27,551	20,890
Economics	540	578	613	741	632	491	1,441	2,195
Political science	5585	5,264	4,969	7,471	6,346	3,799	5,781	4,523
Sociology	0	0	0	0	0	0	0	0
Other, n.e.c.	16255	15,562	15,492	25,113	22,253	18,652	20,329	14,172
Other sciences, n.e.c.	46618	44,002	41,244	24,753	11,733	5,962	5,583	4,705

[1] Data for metallurgical and materials engineering were not collected separately prior to fiscal year 1990.

NOTE: Because of rounding, figures may not add to the totals shown

KEY: n.e.c. = not elsewhere classified
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-73. R&D expenditures at university-administered federally funded research and development centers, by science and engineering field: fiscal year 1994

[Dollars in thousands]

Page 1 of 1

Institution and ranking	Total	Engineering	Physical sciences	Environmental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Total, all institutions	5,270,883	1,691,089	2,188,768	396,919	732,936	189,881	807	22,672	47,811
1 Los Alamos National Lab	1,089,799	416,367	432,975	0	107,206	73,232	0	21,516	38,503
2 Jet Propulsion Laboratory	1,049,345	431,798	73,569	107,219	436,759	0	0	0	0
3 Lawrence Livermore Lab	904,800	300,064	467,721	21,859	98,762	16,394	0	0	0
4 Argonne Natl Laboratory	499,168	216,960	135,846	112,600	11,469	22,293	0	0	0
5 MIT Lincoln Laboratory	341,929	234,974	64,796	6,681	35,478	0	0	0	0
6 Brookhaven Natl Lab[1]	286,625	72,880	171,991	13,054	1,665	25,622	0	1,036	377
7 Lawrence Berkeley Lab	273,000	11,929e	187,692e	15,648e	3,558e	45,242e	0e	0e	8,931e
8 Fermi Natl Accel Lab[2]	235,773	0	235,773	0	0	0	0	0	0
9 Stanford Linear Accel Ctr	124,421	0	124,421	0	0	0	0	0	0
10 Natl Ctr Atmos Res[3]	118,247	0	0	118,247	0	0	0	0	0
Total, 1st 10 insts	4,923,107	1,684,972	1,894,784	395,308	694,897	182,783	0	22,552	47,811
11 Plasma Physics Lab	102,325	0	102,325	0	0	0	0	0	0
12 Natl Optical Astro Obs[4]	73,104	0	73,104	0	0	0	0	0	0
13 Continuous Elec Beam	54,614	0	53,9[illegible]	0	680	0	0	0	0
14 Software Engineering Inst	32,893	0	0	0	32,893	0	0	0	0
15 Ames Laboratory	31,993	6,117	21,410	0	4,466	0	0	0	0
16 Natl Radio Astron Obs[1]	29,940	0	29,940	0	0	0	0	0	0
17 Natl Astron & Ionos Ctr	12,800	0	11,474	1,326	0	0	0	0	0
18 Oak Ridge Inst S&E[5]	10,107	0e	1,797e	285e	0e	7,098e	807e	120e	0e
Total, 1st 18 insts	5,270,883	1,691,089	2,188,768	396,919	732,936	189,881	807	22,672	47,811

[1] Associated Universities, Inc

[2] Universities Research Association

[3] University Corporation for Atmospheric Research

[4] Association of Universities for Research in Astronomy, Inc

[5] Oak Ridge Associated Universities

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
— = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

Table B-74. Total and federally financed R&D expenditures at university-administered federally funded research and development centers: fiscal years 1991-94

[Dollars in thousands]

Page 1 of 1

Institution and ranking	Total				Federally financed			
	1994	1993	1992	1991	1994	1993	1992	1991
Total, all institutions	5,270,883	5,295,403	5,247,271	5,078,386	5,202,525	5,241,537	5,197,986	5,033,968
1 Los Alamos National Lab	1,089,799	1,084,200	1,011,005	947,550	1,074,999	1,066,887	993,839	930,101
2 Jet Propulsion Laboratory	1,049,345	1,100,529	1,136,966	1,105,617	1,049,345	1,100,529	1,136,966	1,105,617
3 Lawrence Livermore Lab	904,800	998,649	1,055,600	1,135,400	897,111	995,083	1,054,953	1,133,588
4 Argonne Natl Laboratory	499,168	447,880	440,648	392,934	487,164	436,933	433,670	384,212
5 MIT Lincoln Laboratory	341,929	355,197	364,212	389,453	338,236	355,197	364,212	389,453
6 Brookhaven Natl Lab[1]	286,625	293,093	298,112	283,903	286,625	293,093	298,112	283,903
7 Lawrence Berkeley Lab	273,000	262,679e	239,405	207,856	258,820e	250,177e	227,414	195,865
8 Fermi Natl Accel Lab[2]	235,773	200,698	197,653	180,582	235,773	200,698	197,653	180,582
9 Stanford Linear Accel Ctr	124,421	137,081	117,715	113,932	124,421	137,081	117,715	113,932
10 Natl Ctr Atmos Res[3]	118,247	98,627	95,510	78,284	103,601	92,040	84,726	76,388
Total, 1st 10 insts.	4,923,107	4,978,633	4,956,826	4,835,511	4,856,095	4,927,718	4,909,260	4,793,641
11 Plasma Physics Lab	102,325	116,354	110,209	90,818	102,195	115,841	110,072	90,597
12 Natl Optical Astro Obs[4]	73,104	40,135	35,582	27,374	73,104	40,135	35,582	27,374
13 Continuous Elec Beam	54,614	34,924	30,076	28,590	53,789	34,155	29,275	27,464
14 Software Engineering Inst	32,893	35,149	32,552	27,139	32,893	35,149	32,552	27,139
15 Ames Laboratory	31,993	34,262	31,415	26,245	31,993	34,262	31,415	26,245
16 Natl Radio Astron Obs[1]	29,940	28,412	26,706	21,872	29,743	27,803	26,706	21,872
17 Natl Astron & Ionos Ctr	12,800	10,990	9,332	8,078	12,682	10,843	9,200	7,988
18 Oak Ridge Inst S&E[5]	10,107	11,108	11,840	10,430	10,031	11,048	11,194	9,500
Total, 1st 18 insts.	5,270,883	5,289,967	5,244,538	5,076,057	5,202,525	5,236,954	5,195,256	5,031,820
Total, all other sampled insts.	0	5,436	2,733	2,329	0	4,583	2,730	2,148

[1] Associated Universities, Inc

[2] Universities Research Association

[3] University Corporation for Atmospheric Research

[4] Association of Universities for Research in Astronomy, Inc

[5] Oak Ridge Associated Universities

NOTE: Because of rounding, figures may not add to the totals shown.

KEY:
e = estimated
i = imputed
-- = not available

SOURCE: National Science Foundation/SRS, Survey of Scientific and Engineering Expenditures at Universities and Colleges, Fiscal Year 1994

SECTION C.

UNIVERSITY-ADMINISTERED FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS: FY 1994

DEPARTMENT OF DEFENSE

Lincoln Laboratory
    (Massachusetts Institute of Technology)
Software Engineering Institute
    (Carnegie Mellon University)

DEPARTMENT OF ENERGY

Ames Laboratory
    (Iowa State University of Science and Technology)
Argonne National Laboratory
    (University of Chicago and Argonne Universities Association)
Brookhaven National Laboratory
    (Associated Universities, Inc.)
Continuous Electron Beam Accelerator Facility
    (Southeastern Universities Research Association)
E.O. Lawrence Berkeley Laboratory
    (University of California)
E.O. Lawrence Livermore Laboratory
    (University of California)
Fermi National Accelerator Laboratory
    (Universities Research Association)
Los Alamos National Laboratory
    (University of California)
Oak Ridge Institute of Science and Education
    (Oak Ridge Associated Universities)
Plasma Physics Laboratory
    (Princeton University)
Stanford Linear Accelerator Center
    (Stanford University)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Jet Propulsion Laboratory
    (California Institute of Technology)

NATIONAL SCIENCE FOUNDATION

National Astronomy and Ionosphere Center
    (Cornell University)
National Center for Atmospheric Research
    (University Corporation for Atmospheric Research)
National Optical Astronomy Observatory
    (Association of Universities for Research in Astronomy, Inc.)
National Radio Astronomy Observatory
    (Associated Universities, Inc.)

SECTION D.

SURVEY INSTRUMENTS

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NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230

Dear Colleague:

The National Science Foundation (NSF) requests your participation in its annual Survey of Scientific and Engineering Expenditures at Universities and Colleges (R&D Expenditures Survey), Fiscal Year (FY) 1994. This national survey, one of a series on academic science and engineering (S&E) resources, collects data on current fund expenditures for separately budgeted research and development by S&E field and source of funds, and on current fund expenditures for related research equipment.

These data are solicited under the authority of the National Science Foundation Act of 1950, as amended, and are for statistical use only. Members of Congress, Federal and State governmental planners, and officials in the academic sector use the data to assess the adequacy of the Nation's research base. By contributing timely and accurate information to this survey, you can ensure that your institution is represented in data used by these decisionmakers. You may also find the data useful to your own institution for internal and/or peer analyses.

The survey covers U.S. institutions that currently have doctoral programs in S&E fields and/or annually perform at least $50,000 in separately budgeted research and development S&E activities. While participation is voluntary and failure to respond will not have any adverse effect upon your institution, the reliability of the data and therefore the soundness of institutional, State, and national decisions based upon them are in large measure contingent upon receipt of complete and accurate data from all surveyed institutions. **The survey questionnaire is due January 6, 1995.**

This packet contains the following items:

1. Postcard to acknowledge that you have received this package
2. FY 1994 R&D Expenditures Survey Questionnaire (NSF Form 411), with instructions and NSF/NCES crosswalk
3. FY 1994 Optional Item Survey Form
4. "FYI" flyer describing the NSF academic survey system
5. Facsimile showing data reported for your institution on the FY 1991–93 surveys
6. Question-and-Answer booklet
7. Automated Survey Questionnaire (ASQ) diskette
8. Envelope for returning the completed survey questionnaire

Please let us know if your package is not complete.

POSTCARD
Please take a moment to let us know you have received this package by completing and mailing the enclosed postcard, giving the name and telephone number of the person responsible for completing the survey form.

FY 1994 SURVEY QUESTIONNAIRE (NSF FORM 411) WITH INSTRUCTIONS AND NSF/NCES CROSSWALK
The data items requested on the enclosed FY 1994 questionnaire are identical to those requested for FY 1993. The Crosswalk shown on the last two pages of the questionnaire maps NSF's fields of

science and engineering to corresponding codes defined by the Department of Education's National Center for Education Statistics (NCES) in *A Classification of Instructional Programs*. Respondents whose institution's records systems use the NCES classification should find the Crosswalk useful.

To help us monitor survey response burden, we ask you to estimate and report the number of hours you needed to complete the survey.

OPTIONAL ITEM 1 SURVEY FORM

Optional item 1 is an alternative format for reporting data in item 1 (current fund expenditures for separately budgeted R&D in the sciences and engineering, by source of funds) of the R&D Expenditures Survey. This format may become part of the survey questionnaire in FY 1995, but is optional this year. Item 1A identifies the component elements of institutionally funded R&D expenditures. Item 1B requests the amounts of your total and Federal R&D expenditures that were passed through by your institution to subrecipients.

Please complete the optional item and return it with the survey questionnaire. All data reported by individual institutions on the optional item are STRICTLY CONFIDENTIAL. These data will not be published nor made available at any level to the public; they will be used only for internal analyses.

AUTOMATED SURVEY QUESTIONNAIRE

A diskette is enclosed containing the Automated Survey Questionnaire (ASQ), which provides you with a more convenient way to report your data. The ASQ allows you to check your responses for both arithmetic and trend errors before returning your report to NSF. To use the automated questionnaire, you will need an IBM PC or compatible computer system and DOS 3.0 or a more recent upgrade.

FOR MORE INFORMATION

An experimental Mosaic home page for the R&D Expenditures Survey is available through the World Wide Web on the Internet. The page contains information about the survey and provides direct access to publications and data. To reach our home page, direct your browser to the following URL address: *http://www.qrc.com/rdexp/start.htm*. We would be very interested in hearing your comments or suggestions about the project.

If you prefer to submit your data electronically (either in a layout similar to the questionnaire or using the ASQ format), please send e-mail to jlewis@qrc.com.

If you have questions about the survey or would like information about our publications or data, please call Marge Machen of NSF at (703) 306-1772 or John Lewis of Quantum Research Corp. at (301) 657-3070.

Thank you for your efforts in providing timely and meaningful statistics to NSF.

Sincerely,

John E. Jankowski, Jr.

John E. Jankowski, Jr., Program Director
Science and Engineering Activities Program
Division of Science Resources Studies

Enclosures

NSF Form 411 (10-94)

FORM APPROVED
OMB No. 3145-0100
Expiration Date: 9/30/96

NATIONAL SCIENCE FOUNDATION
ARLINGTON, VA 22230

SURVEY OF SCIENTIFIC AND ENGINEERING EXPENDITURES AT UNIVERSITIES AND COLLEGES, FY 1994

Organizations are requested to complete and return this form to:
Quantum Research Corporation
7315 Wisconsin Avenue, Suite 631W
Bethesda, MD 20814

If you prefer, your response to the survey may be sent by e-mail to:
jlewis@qrc.com

This form should be returned by January 6, 1995.

Your cooperation in returning the survey questionnaire promptly is very important.

This information is solicited under the authority of the National Science Foundation Act of 1950, as amended. All information you provide will be used for statistical purposes only. Your response is entirely voluntary and your failure to provide some or all of the information will in no way adversely affect your institution.

All financial data requested on this form should be reported in thousands of dollars; for example, an expenditure of $25,342 should be rounded to the nearest thousand dollars and reported as $25.

Where exact data are not available, estimates are acceptable. Your estimates will be better than ours.

Include data for branches and all organizational units of your institution, such as medical schools and agricultural experiment stations. Data on research centers and facilities administered by your institution should be included. In addition, include hospitals or clinics owned, operated, or controlled by universities, and integrated operationally with the clinical programs of your medical schools. **Exclude** data for federally funded research and development centers (FFRDCs). Data for these facilities are collected separately.

Please correct if name or address has changed

If you have any questions please contact Marge Machen of NSF at (703) 306-1772, or John Lewis or Georgeen Newland of QRC at (301) 657-3070.

Financial data are requested for your institution's 1994 fiscal year.
Please circle the month in which your institution's fiscal year begins

1 JAN	2	3	4	5	6	7	8	9	10	11	12 DEC

It is estimated that response to this survey will require 19 hours. If you wish to comment on this burden, please contact Herman Fleming of NSF at (703) 306-1243.

How many person hours were required to complete this form? ________________

Date submitted ________________

Scope:

This survey collects data on expenditures by universities and colleges for separately budgeted research and development (R&D) in science and engineering. Definitions used are compatible with OMB Circular A-21, revised July 23, 1992. Items 1 and 2 ask for *current fund expenditures* by source of funds and by field of science & engineering. Item 3 collects data on that *portion of current fund expenditures* reported in items 1 and 2 that went for the purchase of scientific and engineering research equipment.

Definitions:

Research and Development (R&D). R&D for purposes of this survey is the same as "organized research" as defined in Section B.1.b. of OMB Circular A-21 (revised). It includes all R&D activities of an institution that are *separately budgeted and accounted for.* R&D includes both "sponsored research" activities (sponsored by Federal and non-Federal agencies and organizations) and "university research" (separately budgeted under an internal application of institutional funds).

Research is systematic study directed toward fuller knowledge or understanding of the subject studied. Research is classified as either basic or applied, according to the objectives of the investigator.

Development is systematic use of the knowledge or understanding gained from research, directed toward the production of useful materials, devices, systems, or methods, including design and development of prototypes and processes.

Current fund expenditures. These are expenditures of funds available for current operations. Such expenditures include all unrestricted gifts and restricted current funds to the extent that such funds were expended for current operating purposes.

PERSON WHO SUBMITTED THIS FORM (PLEASE TYPE OR PRINT)

NAME:	TELEPHONE NUMBER:
TITLE:	E-MAIL:

PERSON WHO PREPARED THIS FORM (IF DIFFERENT FROM ABOVE)

NAME:	TELEPHONE NUMBER:
TITLE:	E-MAIL:

Instructions for Items 1 and 2

Separately budgeted research and development (R&D) includes all funds expended for activities specifically organized to produce research outcomes and commissioned by an agency either external to the institution or separately budgeted by an organizational unit within the institution. *Include* research equipment purchased under research project awards from "current fund" accounts. Also *include* research funds for which an outside organization, educational or other, is a subrecipient. *Exclude* training grants, public service grants, demonstration projects, clinical trials, and departmental research expenditures that are not separately budgeted. Also, *exclude* any R&D expenditures in the fields of education, law, humanities, music, the arts, physical education, library science, as well as all other non-science fields. Allocate funding to the original sources whenever possible, as specified below. If this information is unknown, report the proximate funding source.

(1) **Total**

- a. ***Federal Government.*** Report awards for R&D (including direct and reimbursed indirect costs) by all agencies of the Federal Government.
- b. ***State and local governments.*** Include funds for R&D (including direct and reimbursed indirect costs) from State, county, municipal, or other local governments and their agencies. Include here State funds that support R&D at agricultural and other experiment stations.
- c. ***Industry.*** Include all awards for R&D (including direct and reimbursed indirect costs) from profit-making organizations, whether engaged in production, distribution, research, service, or other activities. Do not include awards from nonprofit foundations financed by industry; these should be reported under "All other sources" (line 1175).
- d. ***Institution funds.*** Report funds, *including* related indirect costs, that your institution spent for R&D activities from the following unrestricted sources: general-purpose State or local government appropriations; general-purpose awards from industry, foundations, or other outside sources; tuition and fees; endowment income; gifts; and other institutional funds. In addition, estimate your institution's unreimbursed indirect costs associated with externally funded R&D projects, including mandatory and voluntary cost sharing. To estimate unreimbursed indirect costs, use your ***negotiated research indirect cost rate(s)*** multiplied by the corresponding base(s) minus actual indirect cost recovery.
- e. ***All other sources.*** Include awards for R&D (including direct and reimbursed indirect costs) from nonprofit foundations and voluntary health agencies as well as from all other sources not elsewhere classified. Funds from foundations that are affiliated with, or granted solely to your institution, should be included under line 1160, "Institution funds." Funds for R&D received from a health agency that is a unit of a State or local government should be reported under "State and local governments" (line 1125). Also include gifts from individuals that are restricted by the donor to research.

(2) **Basic research. Please provide the percentages of total and Federal expenditures that are basic research (not applied research) as defined in column (2) of Item 1.**

Instructions for Item 3

Please report that ***portion*** of current fund expenditures reported in items 1 and 2 that went for the purchase of research equipment. This includes all research equipment purchased under sponsored research project awards from current fund accounts.

For column (1) report current fund expenditures for R&D from all sources: Federal Government, State, county, municipal or other governments and their agencies (including State funds supporting R&D at agricultural experiment stations); industry; institution funds; and private foundations and voluntary health agencies, individuals, and associations.

For column (2) include funds from awards for R&D sponsored by agencies of the Federal Government.

ITEM 1. CURRENT FUND EXPENDITURES FOR SEPARATELY BUDGETED RESEARCH AND DEVELOPMENT IN THE SCIENCES AND ENGINEERING, BY SOURCE OF FUNDS: FY 1994 (Include indirect costs)

Source of Funds	Line No.	(1) Total (Dollars in Thousands)	(2) Percentages of Total & Federal Funds That Are Basic Research
a. Federal Government	1110	$	________ %
b. State and local governments	1125		**Basic research is directed toward an increase of knowledge; it is research where the primary aim of the investigator is a fuller knowledge or understanding of the subject under study rather than a specific application thereof.**
c. Industry	1150		
d. Institution funds (sum of lines 1161 and 1162)	1160		
(1) Institutionally financed organized research	1161		
(2) Unreimbursed indirect costs and related sponsored research	1162		
e. All other sources	1175		
f. TOTAL (sum of a through e)	1100	$	________ %

CONFIDENTIALITY
Information received from individual institutions in lines 1161 and 1162, or estimates for basic research expenditures, will NOT be published or released; only aggregate totals will appear in tabulations.

Note: Total R&D expenditures reported in line 1100, column (1) and line 1400, column (1) should be the same.
Federally financed R&D expenditures reported in line 1110, column (1) and line 1400, column (2) should be the same.

BEST COPY AVAILABLE

ITEM 2. CURRENT FUND EXPENDITURES (TOTAL AND FEDERALLY FINANCED) FOR SEPARATELY BUDGETED RESEARCH AND DEVELOPMENT, BY FIELD OF SCIENCE & ENGINEERING: FY 1994

(Include indirect costs)

Field of science & engineering	Line No.	(Dollars in thousands)	
		(1) Total	(2) Federal
a. ENGINEERING (TOTAL)	1410	$	$
(1) Aeronautical & astronautical	1411		
(2) Chemical	1412		
(3) Civil	1413		
(4) Electrical	1414		
(5) Mechanical	1415		
(6) Metallurgical & materials	1417		
(7) Other	1416		
b. PHYSICAL SCIENCES (TOTAL)	1420		
(1) Astronomy	1421		
(2) Chemistry	1422		
(3) Physics	1423		
(4) Other	1424		
c. ENVIRONMENTAL SCIENCES (TOTAL)	1430		
(1) Atmospheric	1431		
(2) Earth sciences	1432		
(3) Oceanography	1433		
(4) Other	1434		
d. MATHEMATICAL SCIENCES (TOTAL)	1441		
e. COMPUTER SCIENCES (TOTAL)	1442		
f. LIFE SCIENCES (TOTAL)	1450		
(1) Agricultural	1451		
(2) Biological	1452		
(3) Medical	1453		
(4) Other	1454		
g. PSYCHOLOGY (TOTAL)	1460		
h. SOCIAL SCIENCES (TOTAL)	1470		
(1) Economics	1471		
(2) Political science	1472		
(3) Sociology	1473		
(4) Other	1474		
i. OTHER SCIENCES, not elsewhere classified (TOTAL)	1480		
j. TOTAL (sum of a through i)	1400	$	$

Please EXCLUDE from your response any R&D expenditures in the fields of education, law, humanities, music, the arts, physical education, library science, and all other non-science and engineering fields.

ITEM 3. CURRENT FUND EXPENDITURES FOR RESEARCH EQUIPMENT (TOTAL AND FEDERALLY FINANCED) FOR SEPARATELY BUDGETED RESEARCH AND DEVELOPMENT, BY FIELD OF SCIENCE & ENGINEERING: FY 1994

Field of science & engineering	Line No.	(Dollars in thousands)	
		(1) Total	(2) Federal
a. ENGINEERING (TOTAL)	1810	$	$
(1) Aeronautical & astronautical	1811		
(2) Chemical	1812		
(3) Civil	1813		
(4) Electrical	1814		
(5) Mechanical	1815		
(6) Metallurgical & materials	1817		
(7) Other	1816		
b. PHYSICAL SCIENCES (TOTAL)	1820		
(1) Astronomy	1821		
(2) Chemistry	1822		
(3) Physics	1823		
(4) Other	1824		
c. ENVIRONMENTAL SCIENCES (TOTAL)	1830		
(1) Atmospheric	1831		
(2) Earth sciences	1832		
(3) Oceanography	1833		
(4) Other	1834		
d. MATHEMATICAL SCIENCES (TOTAL)	1841		
e. COMPUTER SCIENCES (TOTAL)	1842		
f. LIFE SCIENCES (TOTAL)	1850		
(1) Agricultural	1851		
(2) Biological	1852		
(3) Medical	1853		
(4) Other	1854		
g. PSYCHOLOGY (TOTAL)	1860		
h. SOCIAL SCIENCES (TOTAL)	1870		
(1) Economics	1871		
(2) Political science	1872		
(3) Sociology	1873		
(4) Other	1874		
i. OTHER SCIENCES, not elsewhere classified (TOTAL)	1880		
j. TOTAL (sum of a through i)	1800	$	$

Current fund expenditures in each field for scientific research equipment should be a SUBSET of the "Total" and "Federal" columns reported in item 2.

CROSSWALK BETWEEN NSF FIELDS OF SCIENCE & ENGINEERING AND THE NATIONAL CENTER FOR EDUCATION STATISTICS (NCES) CLASSIFICATION OF INSTRUCTIONAL PROGRAMS

The left-hand column shows each of the detailed fields as displayed on the questionnaire form. The right-hand column shows the NCES fields that are included within the NSF category as well as some additional illustrative disciplines. These additional disciplines are intended to be guidelines—not sharp definitions—as to what should be reported under a particular field.

Questionnaire Field	NCES Classification and Additional Illustrative Disciplines
a. ENGINEERING **(1) Aeronautical and Astronautical**	14.02 Aerospace, Aeronautical, and Astronautical Engineering (also aerodynamics, space technology)
(2) Chemical	03.0509 Wood Science 14.07 Chemical Engineering 14.25 Petroleum Engineering 14.32 Polymer/Plastics Engineering (also petroleum refining process)
(3) Civil	04.02 Architecture 14.04 Architectural Engineering 14.08 Civil Engineering 14.14 Environmental/Environmental Health Engineering (also geotechnical, hydraulic, hydrologic, sanitary and environmental, structural, transportation)
(4) Electrical	14.09 Computer Engineering 14.10 Electrical, Electronics, and Communications Engineering (also power engineering)
(5) Mechanical	14.11 Engineering Mechanics 14.19 Mechanical Engineering
(6) Metallurgical & Materials	14.06 Ceramic Sciences and Eng. 14.15 Geological Engineering 14.16 Geophysical Engineering 14.18 Materials Engineering 14.20 Metallurgical Engineering 14.21 Mining and Mineral Eng. 14.28 Textile Sciences and Eng. 14.31 Materials Science 40.0701 Metallurgy (also welding)
(7) Other	14.01 Engineering, General 14.03 Agricultural Engineering 14.05 Bioengineering and Biomedical Engineering 14.12 Engineering Physics 14.13 Engineering Science 14.17 Industrial/Manufacturing Eng. 14.22 Naval Architecture and Marine Engineering 14.23 Nuclear Engineering 14.24 Ocean Engineering 14.27 Systems Engineering 14.29 Engineering Design 14.30 Eng./Industrial Management 14.99 Engineering, Other 30.06 Systems Science and Theory (also marine and ocean engineering systems)
b. PHYSICAL SCIENCES **(1) Astronomy**	40.02 Astronomy 40.03 Astrophysics (also Gamma-ray, neutrino, optical and radio, X-ray)
(2) Chemistry	40.05 Chemistry (also analytical, inorganic, organic, organo-metallic, pharmaceutical, physical, polymer sciences (except biochemistry))
(3) Physics	40.08 Physics (also acoustics, atomic/molecular, chemical, condensed matter, elementary particles, nuclear structure, optics, plasma, theoretical/mathematical)
(4) Other	40.01 Physical Sciences, General 40.0799 Miscellaneous Physical Sciences, Other 40.99 Physical Sciences, Other (used for multidisciplinary projects within physical sciences and for disciplines not requested separately)
c. ENVIRONMENTAL SCIENCES (Earth, Atmospheric, & Ocean) **(1) Atmospheric**	40.04 Atmospheric Sciences and Meteorology (also aeronomy, extraterrestrial atmospheres, solar, weather modification)
(2) Earth Sciences	15.1102 Surveying 40.06 Geological and Related Sciences 40.0703 Earth & Planetary Sciences 45.0702 Cartography (also engineering geophysics, general geology, geodesy and gravity, geomagnetism, hydrology, inorganic, isotopic, lab geophysics, organic geochemistry, paleomagnetism, paleontology, physical geography, seismology)
(3) Oceanography Sciences	26.0607 Marine/Aquatic Biology 40.0702 Oceanography (also biological, chemical, geological, physical)
(4) Other	(used for multidisciplinary projects within Earth, Atmospheric, and Ocean Sciences)
d. MATHEMATICAL SCIENCES	27.01 Mathematics, General 27.03 Applied Mathematics 27.0302 Operations Research 27.05 Mathematical Statistics 27.99 Mathematics, Other 30.08 Math./Computer Sciences (also algebra, analysis, foundations and logic, geometry, numerical analysis, topology)
e. COMPUTER SCIENCES	11 Computer and Information Science, General 52.1201 Management Information Systems (also design, development, and application of computer capabilities to data storage and manipulation, information science)

Questionnaire Field	NCES Classification and Additional Illustrative Disciplines (cont.)					
f. LIFE SCIENCES **(1) Agricultural**	01.03	Agricultural Production	01.0303	Aquaculture	01.07	International Agriculture
	02.01	Agricultural Sciences	02.04	Plant Sciences	02.05	Soil Science
	03	Renewable Natural Resources	04.06	Landscape Architecture		
	(also agricultural chemistry, agronomy, animal science, conservation, fish and wildlife, forestry, horticulture)					
(2) Biological	19.05	Foods and Nutrition Studies	26.01	Biology, General	26.0202	Biochemistry
	26.0203	Biophysics	26.03	Botany	26.04	Cell and Molecular Biology
	26.05	Microbiology/Bacteriology	26.0601	Anatomy	26.0603	Ecology
	26.0609	Nutritional Sciences	26.0610	Parasitology	26.0612	Toxicology
	26.0613	Genetics, Plant and Animal	26.0614	Biometrics	26.0615	Biostatistics
	26.0699	Misc. Bio. Specializations, Other	26.0701	Zoology	26.0702	Entomology
	26.0704	Pathology, Human and Animal	26.0705	Pharmacology, Human and Animal	26.0706	Physiology, Human and Animal
	26.0799	Zoology, Other				
	26.99	Biolog./Life Sciences, Other	51.1301	Medical Anatomy	51.1302	Medical Biochemistry
	51.1307	Medical Immunology	51.1308	Medical Microbiology	51.1312	Medical Pathology
	51.1313	Medical Physiology	51.1314	Medical Toxicology	51.2203	Epidemiology
	(also allergies and immunology, biogeography, biotechnology, pathology, physical anthropology, virology)					
(3) Medical	26.0608	Neurosciences	26.0611	Radiation Biology/Radiobiol.	51.04	Dentistry
	51.1201	Medicine, General	51.1399	Med. Basic Sciences, Other	51.1610	Nursing Psychiatry/Mental Health
	51.17	Optometry	51.19	Osteopathic Medicine		
	51.20	Pharmacy	51.21	Podiatry	51.22	Public Health
	51.24	Veterinary Medicine[1]				
		Anesthesiology		Cardiology		Colon and Rectal Surgery
		Dental/Oral Surgery		Dermatology		Family Medicine
		Gastroenterology		General Surgery		Geriatric Medicine
		Hematology		Internal Medicine		Medical Programs, Other
		Neonatal-Perinatal Medicine		Neurological Surgery		Neurology
		Nuclear Medicine		Nuclear Radiology		Obstetrics and Gynecology
		Oncology		Ophthalmology		Orthopedics/Orthopedic Surgery
		Otorhinolaryngology		Pediatrics		Pharmacology
		Physical and Rehabilitative Medicine		Plastic Surgery		Preventive Medicine
		Psychiatry		Thoracic Surgery		Urology
	(exclude all residency programs)					
(4) Other	30.11	Gerontology	51.02	Communication Disorders Sciences and Services	51.07	Health and Medical Administrative Services
	51.10	Health and Medical Laboratory Technologies	51.16	Nursing Technologies	51.2306	Occupational Therapy
	51.2308	Physical Therapy	51.2399	Rehab./Therapeutic Services	51.99	Health Professions and Related Services, Other
	(used for multidisciplinary projects within life sciences)					
g. PSYCHOLOGY	42.01	Psychology, General	42.02	Clinical Psychology	42.17	School Psychology
	51.2301	Art Therapy				
	(also animal behavior, educational, experimental, human development and personality, social)					
h. SOCIAL SCIENCES **(1) Economics**	01.0103	Agricultural Economics	45.06	Economics	52.06	Business/Managerial Econ.
	(also applied, development, econometrics, industrial, international, labor, public finance and fiscal policy, quantitative, resource)					
(2) Political Science	44.04	Public Administration	44.05	Public Policy Analysis		
	44.99	Public Admin. and Services, Other	45.09	International Relations and Affairs		
	45.10	Political Science and Government				
	(also comparative government, legal systems, political theory, regional studies)					
(3) Sociology	45.02	Anthropology (Social and Cultural only)	45.05	Demography and Population Studies	45.11	Sociology
	(also comparative and historical, complex organizations, cultural and social structure, group interactions, social problems and welfare theory)					
(4) Other	04.03	City/Urban, Community, and Regional Planning	05	Area and Ethnic Studies	16.0102	Linguistics
			43.01	Crim'l. Justice & Corrections	44.02	Community Services
	45.01	Social Sciences, General	45.03	Archaeology	45.07	Geography
	45.12	Urban Studies/Affairs	45.99	Social Sciences, Other		
	(also history of science, socioeconomic geography)					
i. OTHER SCIENCES, n.e.c.	(used when the multidisciplinary and interdisciplinary aspects make the classification under one primary field impossible)					

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[1] Institutions with schools of veterinary medicine should distribute R&D expenditures among the appropriate disciplines (agricultural, biological, and medical) rather than only in medical sciences.

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NATIONAL SCIENCE FOUNDATION

Arlington, VA 22230

Survey of Scientific and Engineering Expenditures at Universities and Colleges, FY 1994

OPTIONAL ITEM 1

Current Fund Expenditures for Separately Budgeted R&D in the Sciences and Engineering, by Source of Funds, FY 1994

This year the National Science Foundation is evaluating a proposed revision to Item 1 of its Survey of Scientific and Engineering Expenditures at Universities and Colleges (R&D Expenditures Survey). This revision may become part of the general survey instrument in FY 1995. In accordance with agreements concerning the R&D Expenditures Survey, the revised version is being included as an optional item with the FY 1994 survey. This will allow universities and colleges an opportunity to prepare for and comment on the change in items.

To help NSF better evaluate the implications of this revision, please complete the unshaded portion of the optional item printed below (ITEM 1A). It is not necessary to duplicate your FY 1994 data ***previously entered on your survey form NSF 411 for ITEM 1*** EXCEPT for d., institution funds, lines 1160, 1161, and 1162. In addition, please complete ITEM 1B on the reverse side of this page. These data will NOT be published or available on any basis to the public; they will be used only for internal analytic purposes. NSF would appreciate your comments about reporting in the optional format as opposed to the survey format.

Please read the instructions on the reverse side of this page before completing the optional item. Thank you for your continued efforts in providing timely and meaningful statistics to NSF.

ITEM 1A *(revised):*

Source of Funds	Line No.	(1) Total (Dollars in Thousands)	(2) Percentages of Total & Federal Funds That Are Basic Research
a. Federal Government	1110	$	______ %
b. State and local governments	1125		**Basic research** is directed toward an increase of knowledge; it is research where the primary aim of the **investigator** is a fuller knowledge or understanding of the subject under study rather than a specific application thereof.
c. Industry	1150		
d. Institution funds (sum of lines 1161 and 1162)	1160		
(1) Institutionally financed organized research	1161		
(2) Unreimbursed indirect costs & related sponsored research	1162		

Please check the appropriate box for each of the following elements of institutionally funded R&D expenditures:

	Included in line 1161	Included in line 1162	Not included	
Mandatory cost sharing	☐	☐	☐	
Voluntary cost sharing	☐	☐	☐	
Unreimbursed indirect costs	☐	☐	☐	
Other, please specify		☐	☐	☐

____

____

Source of Funds	Line No.	(1) Total (Dollars in Thousands)	(2) Percentages of Total & Federal Funds That Are Basic Research
e. All other sources	1175		
f. TOTAL (sum of a through e)	1100	$	______ %

Questions on optional item 1 can be directed to Marge Machen of NSF at (703) 306-1772.

ITEM 1B

"Subrecipient means any person or government department, agency, establishment, or nonprofit organization that receives financial assistance to carry out a program through a primary recipient or other subrecipient, but does not include an individual that is a beneficiary of such a program. A subrecipient may also be a direct recipient of Federal awards under other agreements."
—*OMB Circular A-133, Section 1.p.*

Educational [subrecipients] refers to all academic colleges and universities and all units owned, operated, and controlled by such institutions.

(Please report dollars in thousands):

How much of your total R&D expenditures (line 1100) was passed through by your institution to subrecipients?

(line 1910) Educational subrecipients $ ____________
(line 1920) Other subrecipients $ ____________
(line 1900) Total (sum of lines 1910 and 1920) $ ____________

How much of your Federal R&D expenditures (line 1110) was passed through by your institution to subrecipients?

(line 1960) Educational subrecipients $ ____________
(line 1970) Other subrecipients $ ____________
(line 1950) Total (sum of lines 1960 and 1970) $ ____________

Instructions for Item 1A

Separately budgeted research and development (R&D) includes all funds expended for activities specifically organized to produce research outcomes and commissioned by an agency either external to the institution or separately budgeted by an organizational unit within the institution.

INCLUDE research equipment purchased under research project awards from "current fund" accounts. Also *INCLUDE* research funds for which an outside organization, educational or other, is a subrecipient. *EXCLUDE* training grants, public service grants, demonstration projects, and departmental research expenditures which are not separately budgeted. Also, *EXCLUDE* any R&D expenditures in the fields of education, law, humanities, music, the arts, physical education, library science, and all other non-science fields. Allocate funding to the original sources whenever possible, as specified below. If this information is unknown, report the proximate funding source.

COLUMN (1): TOTAL

a. FEDERAL GOVERNMENT (line 1110). Report awards for R&D (including direct and reimbursed indirect costs) by all agencies of the Federal Government.

b. STATE AND LOCAL GOVERNMENTS (line 1125). Include funds for R&D (including direct and reimbursed indirect costs) from State, county, municipal, and other local governments and their agencies. Include here State funds which support R&D at agricultural and other experiment stations. **c. INDUSTRY** (line 1150). Include all awards for R&D (including direct and reimbursed indirect costs) from profit-making organizations, whether engaged in production, distribution, research, service, or other activities. Do not include awards from nonprofit foundations financed by industry; these should be reported under "All other sources" (line 1175). **d. INSTITUTION FUNDS** (line 1160). Report funds, *including* related indirect costs, that your institution spent for R&D activities from the following unrestricted sources: (1) general-purpose State or local government appropriations; (2) general-purpose awards from industry, foundations, or other outside sources; (3) tuition and fees; (4) endowment income; (5) gifts; and (6) other institutional funds.

In addition, estimate your institution's unreimbursed indirect costs associated with externally funded R&D projects, including mandatory and voluntary cost sharing. To estimate unreimbursed indirect costs, use your ***negotiated research indirect cost rate(s)*** multiplied by the corresponding base(s) minus actual indirect cost recovery.

e. ALL OTHER SOURCES (line 1175). Include awards for R&D (including direct and reimbursed indirect costs) from nonprofit foundations and voluntary health agencies as well as from all other sources not listed elsewhere. Funds from foundations which are affiliated with, or awarded solely to your institution, should be included under line 1160, "Institution funds." Funds for R&D received from a health agency which is a unit of a State or local government should be reported under "State and local governments" (line 1125). Also include gifts from individuals which were restricted by the donor to research.

COLUMN (2): BASIC RESEARCH

Distinguish the percent of Federal R&D which is basic (rather than applied) research and the percent of total R&D which is basic research, as defined in Column (2) on the reverse.